UNITED STATES DEPARTMENT OF COMMERCE
OFFICE OF TECHNICAL SERVICES

BIBLIOGRAPHY
OF SCIENTIFIC AND INDUSTRIAL REPORTS

Vol. 8 — March 12, 1948 — No. 11

CONTENTS

CHEMICALS AND ALLIED PRODUCTS.....941 - 982
- PLASTICS AND PLASTICIZERS.....941 - 950
- CHEMICAL ENGINEERING AND EQUIPMENT.....950 - 952
- MISCELLANEOUS CHEMICALS.....953 - 982

MACHINERY (EXCEPT ELECTRICAL).....982 - 984

MEDICAL RESEARCH AND PRACTICE, INCLUDING CLINICAL APPLICATION OF DRUGS AND PHARMACEUTICALS.....984 - 992

METEOROLOGY AND CLIMATOLOGY.....992 - 993

PHOTOGRAPHIC AND OPTICAL GOODS (INCLUDING PHOTOGRAPHIC PROCESSING).993 - 994, 1008 - 1016

PHYSICS.....994 - 997
- GENERAL.....994 - 997
- NUCLEAR.....997

RUBBER AND RUBBER PRODUCTS.....997

TEXTILES AND TEXTILE PRODUCTS.....997 - 1001

PATENTS.....1002 - 1019
- ELECTRICAL MACHINERY, EQUIPMENT, AND SUPPLIES.....1002 - 1008
- PHOTOGRAPHIC AND OPTICAL GOODS (INCLUDING PHOTOGRAPHIC PROCESSING).....1008 - 1016
- TRANSPORTATION EQUIPMENT.....1016 - 1018
- MISCELLANEOUS.....1018 - 1019

REGISTER OF PATENTS AVAILABLE FOR LICENSING OR SALE.....1020 - 1032

PUBLICATIONS ISSUED BY OFFICE OF TECHNICAL SERVICES.....1033 - 1034

v Indicates that reports in the BIOS, CIOS and FIAT series are deposited in the Library of Congress Depository Libraries. For a complete list of these libraries, see page facing page 1, volume 5, of this Bibliography.

In addition to the indexes described on the back cover of this Bibliography, the following reference works are available from the Office of Technical Services:

PB L 87782. HOLLOWAY, O. WILLARD. American and British atomic energy reports: A list of reports on atomic energy released by the Office of Technical Services. Feb 1948. 30 p. Price: 75¢

PB L 81500. HOLLOWAY, O. WILLARD and ISAAC, OLIVER B. Classified list of OTS printed reports: A list of reports on German and Japanese technology, prepared by American investigators, which are available in printed form from the Office of Technical Services. Oct 1947. 59 p. Price: 75¢

PB L 58101-R. SWIFT, GRACE. Government document series, analyzed by Office of Technical Services. Rev. Nov 1947. 45 p. Price: 25¢

PB L 79322. SWIFT, GRACE and ORNE, JEROLD. Subject headings for technical libraries. Jun 1947. 167 p. Price: $1.50

PB L 81803. U. S. OFFICE OF TECHNICAL SERVICES, TECHNICAL INDUSTRIAL INTELLIGENCE DIVISION. Reports resulting from the investigation of German technology, 1945-1946, and index of personnel. May 1947. 207 p. Price: $5.25

A revised list of translated German documents, compiled by O. Willard Holloway, has been prepared for free distribution by the Office of Technical Services. This list, dated March 1, 1948, completely replaces the basic list of December 1, 1947, and Supplement 1, dated January 15, 1948. It includes listings of 214 original German technical documents acquired by OTS investigators in Germany which have been translated by private firms and made available to OTS as a public service, and by private translating firms for sale to the public. The translations cover significant developments in chemicals, medical research, paints, textiles, pharmaceuticals, plastics, and other fields.

ERRATA:

v. 1, p. 948 PB 14505 contains 556 pages and is priced as follows: Microfilm-$12.00 - Photostat-$38.00.

v. 3, p. 628 PB 40846 was erroneously listed as PB 40946.

CHEMICALS AND ALLIED PRODUCTS

Plastics and Plasticizers

PB L 74740. DYNAMIT A.G., VORM. ALFRED NOBEL, TROISDORF, GERMANY. A collection of reports on plastics and allied products. (FIAT Microfilm Reel M 174, Frames 5002-5587) 1942-1945. 586 f. Price: Microfilm-$6.00 - Enlargement Print-$59.00
This FIAT microfilm reel contains 25 items in the field of organic chemistry, dealing largely with plastic products. Individual items are listed below and will be available as enlargement prints only; the entire reel may be purchased in microfilm form for $6.00. Please give PB and frame numbers when ordering individual items from this microfilm reel. The reports date from 1942-1945. In German.

Frames	Title	Price
5002-5003 PB L 74740	"Trolit W2, colored, hardness 70, various colors. In German.	$1.50
5004 PB L 74740	"Trolit B" rods, hardness 70. In German.	1.50
5005-5007 PB L 74740	Trolit WH, colored, hardness 60 and 75, fresh. Trolit HH, colored, hardness 85, fresh. In German.	1.50
5008-5009 PB L 74740	Trolit WW and W, black. In German.	1.50
5010-5011 PB L 74740	Trolit W 5410, black, hardness 65. In German.	1.50
5012-5013 PB L 74740	Trolit W and WH waste products, hardness 70 and 80. In German.	1.50
5014-5015 PB L 74740	Trolit H5, H25, H40, H50, CA 50, CA 60, black, waste products. In German.	1.50
5016-5019 PB L 74740	Trolit 1014, colorless. In German.	1.50
5020-5024 PB L 74740	Trolit, violet. In German.	1.50
5025 PB L 74740	Trolit, ivory color. In German.	1.50
5026-5031 PB L 74740	Trolitul, various brands. In German.	1.50
5032-5037 PB L 74740	Trolit, various colors. In German.	1.50
5038-5041 PB L 74740	Processing of various types of Trolit. In German.	1.50
5042-5047 PB L 74740	Trolitan and Polloras rods, tubes, and profiles. In German.	1.50
5048-5049 PB L 74740	Recipes for Isamid dyes. In German.	1.50
5050-5106 PB L 74740	Trolit raw material plant. Section Polloras. Conditions of condensation. Methods of working. Testing of Polloras, etc. In German.	6.00
5107-5139 PB L 74740	Trolit raw material plant. Section Trolit and Trolitul. In German.	3.50
5140-5183 PB I 74740	Technical resins. In German.	4.50
5184-5284 PB L 74740	Trolit raw material plant. Section Trolitan moulding materials. In German.	10.00
5285-5288 PB L 74040	Price list 1935 for Trolitan press mixtures. In German.	1.50
5289-5574 PB L 74740	Trolit raw material plant. List of final products and intermediates. Specification of the individual products, including calculation. In German.	29.00
5575-5576 PB L 74740	Instructions for the production of Trolan resin for moulding. In German.	1.50
5577-5581 PB L 74740	Investigations as to the influence of ultrasound on phenolformalin condensates. In German.	1.50
5582-5584 PB L 74740	Improving the elastic properties of phenol resins by addition of plasticizers. In German.	1.50
5585-5587 PB L 74740	Precipitation of powdery resin in alkaline phenol resin solutions with two combined water-jet vacuum pumps. In German.	1.50

PB L 74746. DYNAMIT A.G., VORM. ALFRED NOBEL, TROISDORF, GERMANY. Reports on plastic materials. (FIAT Microfilm Reel M 172, Frames 3877-4414) 1939-1946. 538 f. Price: Microfilm-$6.00 - Enlargement Print-$54.00
This FIAT microfilm reel contains 46 items in the field of organic chemistry. Individual items are listed below and will be available as enlargement prints only; the entire reel may be purchased in microfilm form for $6.00. Please include PB and frame numbers when ordering individual items from this microfilm reel. The reports date from 1939-1946. In German.

Frames	Title	Price
3877-3892 PB L 74746	Reports on Trolan glue. In German.	$2.00
3893-3913 PB L 74746	Reports on Trolan glue (phenol resin glue). In German.	2.50
3914-3949 PB L 74746	Production of "Cellon." In German.	4.00
3950-3953 PB L 74746	Drying of celluloid. In German.	1.50
3954-3959 PB L 74746	Dye recipes and production methods for the "Cellon" mixtures. In German.	1.50
3960-3962 PB L 74746	Questionnaire on the Plastics Industry, concerning Cellon. In English..	1.50
3963-3965 PB L 74746	Trolit raw material plant, concerning the supply of "Dynal" for pressing plant II. In German.	1.50
3966-3970 PB L 74746	Contribution to the knowledge of fiber plate resins II. In German.	1.50
3971-3975 PB L 74746	Pressed material from urea melamine mixed resin. In German.	1.50
3976-3977 PB L 74746	Re methylene bichloroacetamide. In German.	1.50
3978 PB L 74746	Polloplas Universal KW. In German.	1.50
3979-3984 PB L 74746	Influencing the reaction "Novolak-Hexa" on the roll, by changing the Novolak condensate. In German.	1.50
3985-3990 PB L 74746	Cellulose wool tissue impregnated to resist swelling. In German.	1.50
3991-3995 PB L 74746	Re: Boecler lacquering machines. In German.	1.50
3996-3999 PB L 74746	Re: Synthetic leather factory Dr. Neumann & Co., Ensber. (Hard	

paper for pressing-off plates). In German. 1.50

4000-4005 PB L 74746 — Webs from glass-fiber and glass-silk. In German. 1.50

4006-4015 PB L 74746 — Status of the experiments for the production of shock-resistant moulding materials based on urea melamine. In German. 1.50

4016-4021 PB L 74746 — Moulding materials from phenylimino-diacetic acid diamide resin. In German. 1.50

4022-4023 PB L 74746 — Zinc sulfite as hardening agent for urea moulding materials. In German. 1.50

4024-4027 PB L 74746 — Report on processing hard paper plates to cylinders. In German. 1.50

4028-4038 PB L 74746 — Testing "FT 58" by means of the gravity pendulum. In German. 1.50

4039-4053 PB L 74746 — Strength of combined synthetic resin moulding materials. In German. 1.50

4054-4057 PB L 74746 — Black pigments for "Phenoplast" pressed powder. In German. 1.50

4058-4189 PB L 74746 — On moulding materials and their production. Description of the equipment used. Pollopas hard paper as raw material. Use of "Dynal." Cost calculations. In German. 13.50

4190-4192 PB L 74746 — Moulding material from hard lignite. In German. 1.50

4193-4198 PB L 74746 — "TROMOVA" plates with resin as binder. In German. 1.50

4199-4206 PB L 74746 — Development and technical application of aniline phenol formaldehyde resin. In German. 1.50

4207-4275 PB L 74746 — Monthly reports of the Trolit raw material plant covering the period Nov 1940 through Oct 1942: concerning technical resins Trolitan A, Trolit, Trolitul, Pollopas, and hard paper. In German. 7.00

4276-4277 PB L 74746 — Methylvinylketone as agent for rendering materials elastic. In German. 1.50

4278-4287 PB L 74746 — Chips of flax textures. Moulding materials poor in resin. In German. 1.50

4288-4293 PB L 74746 — On phenol resins. In German. 1.50

4294-4297 PB L 74746 — Novolak as stabilizer for buna mixtures. In German. 1.50

4298-4301 PB L 74746 — Apparatus for precipitating and filtering resin dissolved in "T 67." In German. 1.50

4302-4304 PB L 74746 — Production of shock-resistant pressed materials from tissue chips based on urea melamine. In German. 1.50

4305-4308 PB L 74746 — The use of further alkylated phenols for moulding materials. In German. 1.50

4309-4313 PB L 74746 — Testing ZnO soap as lubricant for Pollopas. In German. 1.50

4314-4318 PB L 74746 — Mixed condensates from aniline and phenol. In German. 1.50

4319-4321 PB L 74746 — Treatment of Igamid. In German. 1.50

4322-4326 PB L 74746 — Influence of ultrasound on phenol formalin condensates. In German. 1.50

4327-4328 PB L 74746 — "K Wax" as lubricant. In German. 1.50

4329-4341 PB L 74746 — Experiments for producing shock-resistant moulding materials with rolled fiber or "Folgin" paper as filler. In German. 1.50

4342-4381 PB L 74746 — Xylenol last runnings. Melamine moulding materials. In German. 4.00

4382-4388 PB L 74746 — Determination of the free formaldehyde and ammonia occurring in pressed parts from Pollopas. In German. 1.50

4389-4393 PB L 74746 — Experiments for improving the resistance to water and heat of Pollopas by adding phenol formalin condensates. In German. 1.50

4394-4410 PB L 74746 — Ammonia deposition on moulded parts from Pollopas and Ultrapas. In German. 2.00

4411-4414 PB L 74746 — Water absorption of cotton and sodium papers treated with polyethylenimine. In German. 1.50

PB L 85641. BCK. Softeners based on chlorophthalic acid. Feb 1942. 6 p. Price: Microfilm-$1.00 - Photostat-$1.00

Experiments are described on preparation of dibutyl and ethyl-butyl esters of tetrachloro phthalic acid by esterification of the acid with butanol or ethylbutanol respectively. Xylene and methylcyclohexane were used as entrainers in the distillation. In German, with an English summary. Abstract prepared at Headquarters Air Material Command, Wright Field, Dayton, Ohio.

PB L 73276. I.G. FARBENINDUSTRIE A.G, BITTERFELD, GERMANY. Reports on polymerization of vinyl chloride and the production of Igelit. (FIAT Microfilm Reel M 153, Frames 1746-2750). 1937-1944. 1005 f. Price: Microfilm-$6.00 - Enlargement Print-$100.50. This FIAT microfilm reel consists of approximately 220 reports dealing with the production of Igelit and other polyvinyl substances including cast moldings, fibers, sheets, coatings, etc. Individual items are listed below and will be available as enlargement prints. Please include PB and frame numbers when ordering individual items from this reel. In German.

Frames	Title	Price
1746 - 1747 PB L 73276	Reduction of the dry residue of a column mixture in the production of Igelit PC. By Albrecht. Jan 20, 1944. In German.	$1.50
1748 - 1749 PB L 73276	Working schedule concerning Igelit plastics. By Wi-.... May 18, 1943. In German.	1.50
1750 - 1754 PB L 73276	Comparison of the adsorption effect of two activated carbons. By Kaltenborn. Sep 1943/ Feb 1944. In German.	1.50
1755 - 1763 PB L 73276	Losses of methanol in the production of Igelit PC. By Kaltenborn. Feb 8, 24, 1942. In German.	1.50
1764 - 1768 PB L 73276	Purification of a mixture of solvents. By Kaltenborn. Oct 28, 1943/ Nov 4, 1943. In German.	1.50
1769 - 1771 PB L 73276	Separation of a methanol-tetrachloroethane mixture into its components. By Skarda. Mar 9, 1944. In German.	1.50
1772 - 1773 PB L 73276	Steam distillation of a tetrachloroethane-methanol-mixture.	

By Skarda. Feb 21, 1944.
In German. 1.50

1774 and 1778-1780
PB L 73276
Lack of storage space for a methanol tetrachloroethane-mixture.
By Skarda. Jan 5, 1944.
In German. 1.50

1775 - 1777
PB L 73276
Methanol still.
By Skarda and Ilieff.
Jan 20, 1944. In German. 1.50

1778 - 1780
PB L 73276
See frame No. 1774

1781 - 1784
PB L 73276
Testing the operation of vacuum distillation apparatus.
By Skarda. Dec 4, 1943.
In German. 1.50

1785 - 1799
PB L 73276
Problems arising in the manufacture of Igelit PC. By Albrecht.
Dec 7, 1943. In German. 1.50

1800-1808
PB L 73276
Isolation of Igelit PC from tetrachloroethane solution.
By Kaltenborn. Oct 19, 1944.
In German. 1.50

1809 - 1815
PB L 73276
Developing work done in the Igelit PC-plant. By Skarda.
Nov 22, 1944. In German. 1.50

1816 - 1817A
PB L 73276
Losses of tetrachloroethane in the Igelit PC plant.
By Kaltenborn and Skarda.
May 19, 1944. In German. 1.50

1818 - 1820
PB L 73276
Life of distillation columns in the manufacture of Igelit PC.
By H. Skarda. Apr 18, 1944.
In German. 1.50

1821 - 1825
PB L 73276
Quantitative determination of chlorine and hydrogen chloride in the chlorination solution of the Igelit PC plant. By H. Ballabang.
Oct 16, 1938. In German. 1.50

1826 - 1827
PB L 73276
Determination of tetrachloroethane in Igelit PC. By H. Ballabang.
Oct 21, 1938. In German. 1.50

1828 - 1829
PB L 73276
Manufacture of Igelit PC tapes.
By Eberle. Aug 23, 1937.
In German. 1.50

1830 - 1844
PB L 73276
Igelit plastics.
By Hanschke. Mar 8, 1938.
In German. 1.50

1845 - 1847
PB L 73276
Emulsion polymerization of vinyl chloride. By Skarda.
Sep 14, 1938. In German. 1.50

1848 - 1849
PB L 73276
Baffle plates in polymerization vessels. By Ostermayer.
May 31, 1938. In German. 1.50

1850 - 1852
PB L 73276
Intensive filter for a spray-drying apparatus.
By Ostermayer. Jan 21, 1938.
In German. 1.50

1853 - 1854
PB L 73276
Continuous polymerization.
By Bappert. Oct 29, 1937.
In German. 1.50

1855 - 1856
PB L 73276
Presence of Ampho Soap in Igelit PC. May 30, 1938. In German. 1.50

1857 - 1858
1868 - 1869
Polymerization of "Mowylen".
Apr 26, 1938. In German. 1.50

1859 - 1860
PB L 73276
Reactions of vinyl chloride.
Apr 26, 1938. In German. 1.50

1861
PB L 73276
Influence of ethylene oxide on the polymerization of vinyl chloride. Mar 8, 1938.
In German. 1.50

1862 - 1863
PB L 73276
Chlorination of the Igelit intermediate PCU in higher concentration.
Feb 19, 1938. In German. 1.50

1864 - 1865
PB L 73276
Ascertaining of the final point of chlorination in the production of Igelit PC. Nov 19, 1937.
In German. 1.50

1866 - 1867
PB L 73276
Manufacture of Igelit tapes.
Nov 19, 1937. In German. 1.50

1868 - 1869
PB L 73276
See frames No. 1857 - 1858.

1870 - 1876
PB L 73276
Manufacture of Igelit PC in tape form. Nov 1937. In German. 1.50

1877 - 1878
PB L 73276
Polymerization of "Mowylen".
By Lotz. Mar 19, 1938.
In German. 1.50

1879 - 1880
PB L 73276
Identical with Frames 1848-1849.
In German. 1.50

1881
PB L 73276
Polymerization of vinyl chloride.
By Skarda. May 31, 1938.
In German. 1.50

1882 - 1884
PB L 73276
Purification of Igelit PCU.
By Skarda. Sep 19, 1938.
In German. 1.50

1885 - 1908
PB L 73276
Manufacture of Igelit PC tape.
Jul 23, 1938. In German. 1.50

1909 - 1910
PB L 73276
Spinning capability of Igelit brands. By Fink.
Jun 24, 1938. In German. 1.50

1911 - 1914
PB L 73276
Chlorination of Igelit PCU.
By Hanschke. Jan 23, 1940.
In German. 1.50

1915 - 1925
PB L 73276
Atomization of PCU mash.
By Ilieff and Gruhle.
Mar 27, 1939. In German. 1.50

1926
PB L 73276
Preliminary calculation of operating costs of a Nybilosa-apparatus.
Dec 15, 1938. In German. 1.50

1927
PB L 73276
Chlorination of Igelit PCU.
By Runge. Jun 21, 1939.
In German. 1.50

1928
PB L 73276
Without technical interest. 1.50

1929
PB L 73276
Without technical interest. 1.50

1930 - 1935
2203 - 2208
PB L 73276
Chlorination of Igelit PCU.
By Hanschke. n.d.
In German. 1.50

1936 - 1939
PB L 73276
Production of copolymers with vinyl chloride. By Kainz.
Sep 16, 1940. In German. 1.50

1940 - 1941
PB L 73276
Stabilization of Igelit PCU.
By Lotz. Jan 11, 1939.
In German. 1.50

1942 - 1956
PB L 73276
Production of Igelit PC.
By Povens. Nov 7, 1940.
In German. 1.50

1957
PB L 73276
Identical with Frames No. 1929. 1.50

1958
PB L 73276
Precipitation of Igelit PC.
By Runge. Feb 16, 1940.
In German. 1.50

1959
PB L 73276
Purification of Igelit PC.
By Runge. Feb 7, 1940.
In German. 1.50

1960 - 1962 PB L 73276 — Production of Igelit PC. By Runge. Sep 23, 1940. In German. 1.50

1963 - 1964 PB L 73276 — Operating a column of the PC plant. By Skarda, and Iloff. Nov 19, 1940. In German. 1.50

1965 - 1966 PB L 73276 — Drying of S 3-emulsion. By Klitzsch and Skarda. Jun 17, 1940. In German. 1.50

1967 - 1972 1982 - 1989 PB L 73276 — Filtering and drying of polymerized vinyl chloride. By Rumpelt and Skarda. Mar 5, 1940. In German. 1.50

1973 - 1974 PB L 73276 — Throughput determination of a rotary filter. By H. Skarda. Feb 26, 1940. In German. 1.50

1975 - 1981 PB L 73276 — Ampho Soap for polymerization purposes. By H. Skarda. Feb 28, 1940. In German. 1.50

1982 - 1989 PB L 73276 — See frames No. 1967 - 1972.

1990 - 1992 PB L 73276 — Determination of tetrachloroethane in Igelit PC. By Strobel. Sep 18, 1940. In German. 1.50

1993 - 1994 PB L 73276 — Surface tension of solutions of Ampho Soap and sapasinsulfonate. By Strobel. Jul 9, 1940. In German. 1.50

1995 - 1997 PB L 73276 — A new rapid determination of water in polyvinyl chloride and other chemically stable substances. By Strobel. May 17, 1940. In German. 1.50

1998 - 2007 PB L 73276 — Sodium sapasin-sulfonate as an emulsifying agent for polyvinyl chloride emulsions. By Strobel. Mar 19, 1940. In German. 1.50

2008 - 2009 PB L 73276 — Influence of metals and metal salts on the decomposition of benzoyl peroxide. By Strobel. Apr 12, 1940. In German. 1.50

2010 - 2011 PB L 73276 — Determination of increase of product in a polymerization emulsion. By Strobel. Apr 29, 1940. In German. 1.50

2012 - 2013 PB L 73276 — Measuring of surface tension. By Strobel. Apr 28, 1940. In German. 1.50

2014 - 2022 PB L 73276 — Determination of water in moist polyvinyl chloride. By Strobel. Feb 29, 1940. In German. 1.50

2023 PB L 73276 — Valve made of Igelit PCU. By Wi ... Dec 6, 1940. In German. 1.50

2024 PB L 73276 — Manufacture of Igelit PCU. Jul 31, 1940. In German. 1.50

2025 PB L 73276 — Packing of cast parts made of Igelit. Apr 2, 1941. In German. 1.50

2026 - 2027 PB L 73276 — Enameled tubular autoclaves. By Iloff. Sep 15, 1941. In German. 1.50

2028 - 2029 PB L 73276 — Cooling of autoclaves. By Iloff and others. Jul 31, 1941. In German. 1.50

2030 - 2031 PB L 73276 — New emulsifying agents for the polymerization of vinyl chloride. By Iloff. Sep 12, 1941. In German. 1.50

2032 PB L 73276 — Contamination of Igelit PCU. By Iloff. Sep 11, 1941. In German. 1.50

2033 - 2045 PB L 73276 — "S3" polymerization emulsions. By Skarda and Kainz. Sep 20, 1941. In German. 1.50

2046 - 2051 PB L 73276 — Igelit plant. By Skarda. Sep 19, 1941. In German. 1.50

2052 - 2054 PB L 73276 — Identical with frames 2041-2043. 1.50

2055 - 2058 PB L 73276 — Chlorination of "S3"-emulsion. By Skarda. Jul 8, 1941. In German. 1.50

2059 PB L 73276 — Prevention of froth formation on emulsifying solutions. By H. Skarda. Jul 14, 1941. In German. 1.50

2060 PB L 73276 — Explosion in the Igelit PCU plant. By Skarda. Jul 16, 1941. In German. 1.50

2061 - 2064 PB L 73276 — Emulsifying agents for emulsion polymerization. By H. Skarda. Jul 22, 1941. In German. 1.50

2065 - 2066 PB L 73276 — Production of Vinoflex. By Wi..... Jun 7, 1941. In German. 1.50

2067 - 2074 PB L 73276 — Nitrogen-containing reaction products from Igelit brands. By Richler. Mar 27, 1941. In German. 1.50

2075 PB L 73276 — Determination of the softening point of a co-polymer. By W. Hildt. May 9, 1941. In German. 1.50

2076 - 2078 PB L 73276 — See frames 2055-2058.

2079 - 2085 PB L 73276 — Igelit PCU manufacture. By Iloff. Mar 27, 1943. In German. 1.50

2086 PB L 73276 — Spray polymerization of vinyl chloride. By Iloff. Jan 14, 1942. In German. 1.50

2087 - 2088 PB L 73276 — Polymerisation of vinyl chloride using mersolat H as emulsifying agent. By Iloff. Jan 12, 1942. In German. 1.50

2089 - 2097 PB L 73276 — Emulsion polymerization of vinyl chloride. By Skarda and Iloff. Nov 17, 1941. In German. 1.50

2098 -2109 PB L 73276 — Production of Igelit. By Iloff and Skarda. Nov 24, 1941. In German. 1.50

2110- 2112 PB L 73276 — Manufacture of "Vinoflex PCU 3". By Kainz. Dec 8, 1941. In German. 1.50

2113 - 2115 PB L 73276 — Production of Igelit PCU. By Kainz. Mar 14, 1942. In German. 1.50

2116 PB L 73276 — Invitation to a lecture. Feb 25, 1942. In German. 1.50

2117 - 2118 PB L 73276 — Production of Igelit PC. By Kaltenborn. Oct 25, 1941. In German. 1.50

2119 - 2124 PB L 73276 — Gelatinizing apparatus for Igelit coatings. By Kittler. Jan 2, 1942. In German. 1.50

2125 - 2126 PB L 73276 — Homogenizing of Igelit PCU pastes. By Kittler. Mar 10, 1942. In German. 1.50

2127 PB L 73276 — Effect of pigment-dispersing agents on viscous polymerization emulsions. By H. Skarda. Apr 10, 1942. In German. 1.50

2128 - 2131 PB L 73276 — Behavior of the emulsifying agent in the polymerization of vinyl chloride. By H. Skarda. Apr 23, 1942. In German. 1.50

2132 - 2135 PB L 73276 — Manufacture of Igelit. By H. Skarda. Mar 23, 1942. In German. 1.50

2136 - 2137 PB L 73276 — Release of pressure from autoclaves. By Skarda. Mar 23, 1942. In German. 1.50

2138 - 2139 PB L 73276 — Production of plastics by emulsion polymerization. By H. Skarda. Oct 9, 1941. In German. 1.50

2140 - 2144 PB L 73276 — Polymerization tests with Mersolate H. By Skarda. Oct 15, 1941. In German. 1.50

2145 - 2148 PB L 73276 — Identical with frames 2098 - 2101. 1.50

2149 PB L 73276 — Chlorination of Igelit PCU. By Wi..... Mar 7, 1942. In German. 1.50

2150 - 2158 PB L 73276 — Identical with frames 2089-2098. 1.50

2159 PB L 73276 — Chlorination of S3-emulsion. By Böttcher. Mar 20, 1942. In German. 1.50

2160 - 2167 PB L 73276 — Chlorination of Igelit PCU. By Böttcher. Jun 29, 1942. In German. 1.50

2168 PB L 73276 — Tests concerning the production of Igelit. By Wick. Jun 2, 1942. In German. 1.50

2169 - 2172 PB L 73276 — Polymerization of vinyl chloride with Mersolat H as an emulsifying agent. By Iloff. Sep 15, 1942. In German. 1.50

2173 - 2178 PB L 73276 — Polymerization tests with vinyl chloride. By Iloff. Jun 8, 1942. In German. 1.50

2179 PB L 73276 — Polymerization of vinyl chloride without an emulsifying agent. By Iloff. Jun 15, 1942. In German. 1.50

2180 PB L 73276 — Polymerization of vinylchloride in iron or copper autoclaves. By Iloff. Jun 18, 1942. In German. 1.50

2181 - 2182 PB L 73276 — Influence of triethylamine on the polymerization of vinyl chloride. By Iloff. Jul 10, 1942. In German. 1.50

2183 - 2186 PB L 73276 — Polymerisation of vinyl chloride with Mersolat. By Skarda and Hoff. Aug 18, 1942. In German. 1.50

2187 - 2188 PB L 73276 — Loss of dust in a filtering device. By Iloff and Skarda. Aug 22, 1942. In German. 1.50

2189 - 2191 PB L 73276 — Production of polyvinyl chloride with Mersolat H as an emulsifying agent. By Iloff and Skarda. Sep 25, 1942. In German. 1.50

2192 PB L 73276 — Chlorination of Igelit. Jun 2, 1942. In German. 1.50

2193 - 2199 PB L 73276 — Ascertaining of originators of proposals for the manufacture of Igelit. By Povens. Oct 26 - 30, 1942. In German. 1.50

2200 - 2202 PB L 73276 — Polymerization of vinyl chloride in lead-lined autoclaves. By Iloff. May 14, 1942. In German. 1.50

2203 - 2208 PB L 73276 — Identical with frames 1930-1935. 1.50

2209 - 2232 PB L 73276 — Precipitation of Igelit PC from a chloroform solution. In German. 2.50

2233 - 2246 PB L 73276 — Washing and filtering of precipitated Igelit PC. By Albrecht. Apr 21, 1943. In German. 1.50

2247 - 2260 PB L 73276 — Twenty illustrations, 3 diagrams and 2 construction schemes concerning 2209-2232. In German. 1.50

2261 - 2262 PB L 73276 — Filtration of the solution of emulsifying agent for the polymerization of vinyl chloride. By Iloff. Aug 14, 1943. In German. 1.50

2263 - 2269 PB L 73276 — Reversible flocculation in the polymerization of vinyl chloride. By Marx and others. Mar 1, 1943. In German. 1.50

2270 - 2271 PB L 73276 — Increase of operating safety in the manufacture of Igelit PCU. By Iloff and Skarda. Feb 26, 1943. In German. 1.50

2272 - 2278 PB L 73276 — Recovery of Igelit PCU from waste water. By Iloff and Skarda. Feb 15, 1943. In German. 1.50

2279 - 2284 PB L 73276 — Manufacture of Igelit PCU. By Iloff and Skarda. Nov 17, 1942. In German. 1.50

2285 - 2288 PB L 73276 — Tests concerning the use of "Stabilizer J" with PCU emulsion. By Iloff and Skarda. Jan 26, 1943. In German. 1.50

2289 - 2292 PB L 73276 — Manufacture of Igelit PCU. By Kains. Jan 26, 1943. In German. 1.50

2293 PB L 73276 — Igelit plant. By Kaltenborn. Jan 20, 1943. In German. 1.50

2294 - 2307 PB L 73276 — Polymerization of vinyl chloride. By Povens. and Iloff. Jul 14, 1943, Oct 14, 1943. In German. 1.50

2308 PB L 73276 — Quality of Igelit PC. By Schönburg. Mar 3, 1943. In German. 1.50

2309 - 2314 PB L 73276 — Chlorination of Igelit PCU. By Povens. Nov 9, 1942. In German. 1.50

2315 - 2320 PB L 73276 — Improvement of the Igelit plant. By Wick and others. Feb 18, 1944. In German. 1.50

2321 - 2322 PB L 73276 — Uniformity of the produced PCU-charges. By Iloff. Oct 7, 1943. In German. 1.50

2323 - 2327 PB L 73276 — Recognizing the final point in after-chlorinating Igelit PCU. By Kaltenborn. Dec 5, 1943. In German. 1.50

2328 - 2344 PB L 73276 — Chlorination of Igelit PCU. By Kaltenborn. Jan 17, 1944. In German. 2.00

2345 - 2351A PB L 73276 — Identical with frames 2294 - 2301. 1.50

2352 - 2354 PB L 73276 — Washing of Igelit PC. By Skarda. Dec 6, 1943. In German. 1.50

2355 - 2362 PB L 73276 — Purification of tetrachlorocthane. By Albrecht. May 25, 1944. In German. 1.50

2363 PB L 73276 — Polymerisation of vinyl chloride. By Iloff. Nov 27, 1944. In German. 1.50

2364 - 2365 2385 - 2386 PB L 73276 — Polymerisation of vinyl chloride. By Iloff. Nov 24, 1944. In German. 1.50

2366 - 2373 PB L 73276 — Work done in the Igelit plant. By Iloff. Nov 23, 1944. In German. 1.50

2374 - 2376 PB L 73276 — Material for the construction of autoclaves for the polymerisation of vinyl chloride. By Iloff. Nov 1, 1944. In German. 1.50

2377 - 2384 PB L 73276 — Emulsifying agents for the polymerisation of vinyl chloride. By Iloff. Nov 21, 1944. In German. 1.50

2385 - 2386 PB L 73276 — See frames No. 2364-2365.

2387 - 2389 PB L 73276 — Test of an emulsifying agent for the emulsion polymerisation of vinyl chloride. By Iloff. Sep 21, 1944. In German. 1.50

2390 - 2391 PB L 73276 — Retesting of a patent of Lonza. By Iloff. Sep 21, 1944. In German. 1.50

2392 - 2398 PB L 73276 — Waterproof Igelit PCU. By Iloff. Jun 29, 1944. In German. 1.50

2399 - 2402 PB L 73276 — Influence of Emulsifier WK on the emulsion polymerisation of vinyl chloride. By Iloff. Jun 20, 1944. In German. 1.50

2403 - 2422 PB L 73276 — Conveyer belts and driving belts made of Igelit PCU. By Hartung. Nov 12, 1942. In German. 2.00

2423 - 2430 PB L 73276 — Identical with frames No. 2263-2269. 1.50

2431 - 2438 PB L 73276 — Identical with frames No. 2272 - 2278. 1.50

2439 - 2441 PB L 73276 — Plasticizers. Apr 20, 1944. In German. 1.50

2442 - 2444 PB L 73276 — Work done in the plastics laboratory (technical). By Albrecht. May 9, 1944. In German. 1.50

2445 - 2464 PB L 73276 — Plasticizers for Igelit PCU. By Hanschke. Aug 26, 1937. In German. 1.50

2465 - 2470 PB L 73276 — Anions which can be washed out of Igelit PCU. By Iloff. Feb 18, 1938. In German. 1.50

2471 - 2472 PB L 73276 — Pipes and porous plates from Igelit PCU. By Iloff. Mar 16, 1938. In German. 1.50

2473 PB L 73276 — Results of determinations of chlorine in Igelit PC. By Povens. Aug 27, 1938. In German. 1.50

2474 - 2475 PB L 73276 — Extraction of Igelit PC. By Povens. May 30, 1938. In German. 1.50

2476 - 2477 PB L 73276 — Cause of turbidity of Igelit PC charges. By Povens. Mar 8, 1938. In German. 1.50

2478 PB L 73276 — See frame 2473.

2479 PB L 73276 — Propyl phosphate benzoate as a plasticiser for Igelit PCU. By Wick. Oct 31, 1938. In German. 1.50

2480 - 2484 PB L 73276 — Insulation of electric wires with Igelit PCU. By Lotz. Nov 25, 1938. In German. 1.50

2485 - 2489 PB L 73276 — Plasticisers for Igelit PCU. By Lotz. Nov 25, 1937. In German. 1.50

2490 - 2493 PB L 73276 — Electrical properties of Igelit PCU. By Schuck (?). Jun 3, 1938. In German. 1.50

2494 - 2497 PB L 73276 — Plasticisers. By Skarda. Jul 25, 1938. In German. 1.50

2498 - 2499 PB L 73276 — Destruction of polyvinyl chloride emulsions. By Skarda. Aug 31, 1938. In German. 1.50

2500 - 2503 PB L 73276 — Reducing the salt content of Igelit PCU. By Skarda. Oct 6, 1938. In German. 1.50

2504 - 2505 PB L 73276 — Brittleness of Igelit PC fibers. By Skarda. Oct 12, 1938. In German. 1.50

2506 PB L 73276 — Depolymerisation of vinyl chloride copolymers and polymerisation of vinyl chloride. By Skarda. Nov 23, 1938. In German. 1.50

2507 - 2511 PB L 73276 — Vulcanization of polyvinyl chloride. By Hanschke. Mar 28, 1940. In German. 1.50

2512 - 2522 A PB L 73276 — Conducting wires insulated with PCU. By Lotz. Dec 12, 1938. In German. 1.50

2523 - 2524 PB L 73276 — Rubber insulated conducting wires. By Schunck(?). Dec 22, 1938. In German. 1.50

2524A- 2528 PB L 73276 — Electric conductors with Igelit insulation. By Schunck. Feb 17, 1939. In German. 1.50

2529 - 2531 PB L 73276 — Concentrating of Igelit PCU emulsion. By Skarda. Jan 26, 1939. In German. 1.50

2532 - 2533 PB L 73276 — Cast moldings from Igelit PCU-paste. By Böttcher. Jun 28, 1939. In German. 1.50

2534 - 2536 PB L 73276 — Difficulties encountered in the production of Igelit PCU pastes. By Böckl. Jan 17, 1939. In German. 1.50

2537 - 2542 PB L 73276 — Tabular and graphical compilation of the physical properties of Mipasin sheets (not characterized). Nov 14, 19... In German. 1.50
Two frames illegible.

2543 - 2549 PB L 73276 — Stabilization of Igelit PCU. By Strobel. Oct 30, 1939. In German. 1.50

2550 PB L 73276 — Test of the water absorption of soft Igelit PCU sheets. By Strobel. Aug 31, 1939. In German. 1.50

2551 PB L 73276 — Stable Igelit PCU emulsions. By Strobel. Aug 21, 1939. In German. 1.50

2552 - 2554 PB L 73276 — Production of polyvinyl chloride resistant to water. By Strobel. Aug 11, 1939. In German. 1.50

2555 - 2564 PB L 73276 — Water absorption of Igelit PCU with a content of annelids. By Karl Kainz. Dec 22, 1939. In German. 1.50

2565 - 2570 PB L 73276 — Stability of washed Igelit PCU. By Iloff. Aug 3, 1940. In German. 1.50

2571 PB L 73276 — Blister formation with Vinidur (Igelit PCU) pipes. By Iloff. Oct 17, 1940. In German. 1.50

2572 - 2574 PB L 73276 — Water absorption of Igelit PCU sheets. By Kainz. Mar 28, 1940. In German. 1.50

2575 - 2582 PB L 73276 — Stabilizers for Igelit PCU. By Kainz. Sep - Nov 1939. In German. 1.50

2583 - 2587 PB L 73276 — Manufacture of Igelit products. By Lotz. Jun 27, 1940. In German. 1.50

2588 - 2590 PB L 73276 — Stabilization of Igelit PCU. By Povenz. Jun 12, 1940. In German. 1.50

2591 PB L 73276 — Influence of the salt content and of the plasticizer on the electric values of soft Igelit PCU sheets. By Strobel. Mar 6, 1940. In German 1.50

2592 - 2594 PB L 73276 — Processing of Igelit PCU. By Grasel, and Iloff. Jun 3, 1941. In German. 1.50

2595 - 2601 PB L 73276 — Testing of stabilizers for Igelit PCU. By Iloff. Aug 4, 1941. In German. 1.50

2602 - 2626 PB L 73276 — Processing of Igelit. By Lotz and Others. Sep 15, 1941. In German. 2.50

2627 - 2631 PB L 73276 — Agglutination tests with Igelit. By Böttcher. Aug 19, 1941. In German. 1.50

2632 - 2633 2636 - 2641 2645 - 2649 2653 - 2659 PB L 73276 — Igelit products. By Hild and others. Mar 27, 1942. In German. 2.00

2634 - 2635 PB L 73276 — Processing of Igelit mixtures. Grusel. Mar 25, 1942. In German. 1.50

2636 - 2641 PB L 73276 — See frame 2632 - 2633.

2642 - 2644 2650-2652 2729 - 2729A PB L 73276 — Stability of Igelit PCU. By Hild and Iloff. Mar 5, 1942 - Nov 26, 1942. In German. 1.50

2645 - 2649 PB L 73276 — See frames No. 2632 - 2633

2650 2652 PB L 73276 — See frames No. 2642 - 2644

2653 - 2659 PB L 73276 — See frames 2632 - 2633.

2660 PB L 73276 — Vinyl chloride polymerization with ozone. By Kainz. Nov 28, 1941. In German. 1.50

2661 - 2670 PB L 73276 — Production, processing and examination of Igelits. By Lotz and others. Aug 31, 1942. 1.50

2671 PB L 73276 — Adhesive effect of Igelit PC solutions. By Hild. Oct 21, 1942. In German. 1.50

2672 - 2673 PB L 73276 — Igelit PC for coating cans for food. By Hild. Sep 1, 1942. In German. 1.50

2674 - 2675 PB L 73276 — Influence of low-molecular portions on the properties of Igelit PCU. By Hild. n.d. In German. 1.50

2676 - 2686 PB L 73276 — Igelit PCU resistant to water. By Iloff. Jun 15, 1942. In German. 1.50

2687 - 2697 2623 - 2727 PB L 73276 — Tensile strength and elongation of Igelit PC threads. By Povena and Böttcher. Jan 8, 1943. In German. 2.00

2698 - 2722 PB L 73276 — Ultraderoscopic investigations of polyvinylchloride. By Marx and others. Oct 21, 1942. In German. 2.50

2723 - 2727 PB L 73276 — See frames No. 2687 - 2697.

2728 PB L 73276 — Manufacture of Igelit PCU threads. By von der Bruck. Jun 30, 1943. In German. 1.50

2729 - 2729 A PB L 73276 — See frames No. 2642 - 2644.

2730 PB L 73276 — Testing of paint films and pastes. By Hild. Nov 20, 1942. In German. 1.50

2731 PB L 73276 — Use of Igelit PC filter cloth in hypochlorite electrolytes. By Hild. Sep 8, 1943. In German. 1.50

2732 - 2733 PB L 73276 — Mechanical properties of different Igelit PCU products. By Hild. Apr 13/ Aug 23, 1943. In German. 1.50

2734 - 2735 PB L 73276 — Measurements of viscosity and density of Igelit PCU emulsions. By Hild. Feb 27, 1943. In German. 1.50

2736 - 2741 PB L 73276 — Stabilization of Igelit PCU emulsions. By Iloff and Skarda. Feb 10, 1943. In German. 1.50

2742 - 2750 PB L 73276 — Viscosity of low-polymeric Igelit PCU solutions. By Kainz. Mar 3, 1943. In German. 1.50

PB L 73276-S. I.G. FARBENINDUSTRIE A.G., BITTERFELD, GERMANY. Reports on polymerization of vinyl chloride and the production of Igelit. (FIAT Microfilm Roe AA 153, Frames 1746-2750, abstract cards). 1937-1944. 227 p. Price: Microfilm-$5.00 - Photostat-$16.00. These are abstracts of the items on microfilm reel AA 153 (PB 73276) described above. They were prepared by FIAT abstracters in Germany.

751195 O—48——2—39

Plastics and Plasticizers (contd)

PB L 70417. I.G.FARBENINDUSTRIE A.G., BOBINGEN, GERMANY. "Perlon". (FIAT Microfilm Reel E 14, Frames 1-865). 1940-1944. 865f. Prices: Microfilm-$6.00 - Enlargement prints-$86.50.

This microfilm was prepared by FIAT investigators in Germany. 105 individual items are listed below and will be available as enlargement prints only. The entire reel may be purchased as a microfilm for $6.00. Please include PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
1-2 PB L 70417	Spinning preparation. By Müller. Oct 6, 1944. In German.	1.50
3-4 PB L 70417	Determination of oxygen in nitrogen. By Müller. Oct 6, 1944. In German.	1.50
5-7 PB L 70417	"Perlon - L", Analysis. By Krumbein. Oct 5, 1944. In German.	1.50
8 PB L 70417	"Perlon" fabrics. By Müller. Sep 23, 1944. In German.	1.50
9-10 PB L 70417	Formulae for "Katanols", "Tanigenes", "Setamoll" and "Eulan". Oct 23, 1942. In German.	1.50
11-25 PB L 70417	"Perlon - L", Tests of the fiber. By Sauer. Dec 7, 1944. In German.	1.50
26 PB L 70417	Determination of "Perlon fiber" mixed with cellulose fiber. By Müller. Dec 7, 1944. In German.	1.50
27-29 PB L 70417	Recovery of wastes from polyamides. By Krumbein. Dec 6, 1944. In German.	1.50
30-32 PB L 70417	Absorption of moisture by "Perlon fibers". By Müller. Dec 6, 1944. In German.	1.50
33-34 PB L 70417	Determination of "Setamol". By Müller. Nov 30, 1944. In German.	1.50
35-36 PB L 70417	Tanning material for "Perlon"fibers. By Müller. Nov 29, 1944. In German.	1.50
37-40 PB L 70417	Polyamides. Recovery of lactams. By Krumbein. Nov 24, 30, 1944. In German.	1.50
41-42 PB L 70417	Decomposition of "Perlon" fibers in sunlight. By Sauer. Nov 23, 1944. In German.	1.50
43 PB L 70417	Contamination of "Perlon fiber" during polymerization. By Sauer. Nov 21, 1944. In German.	1.50
44-55 PB L 70417	Drying and watering polyamides. By Sauer. Nov 18, 1944. In German.	1.50
56-61 PB L 70417	Processing "Perlon" fiber. By Spencker. Nov 14, 1944. In German.	1.50
62-67 PB L 70417	Durability of "Perlon" fibers. By Müller. Nov 3, 1944. In German.	1.50
68-71 PB L 70417	Card tests of "Perlon" fiber. By Spencker. Nov 3, 1944. In German.	1.50
72-74 PB L 70417	Manufacture of"Perlon" fiber. By Spencker. Oct 31, 1944. In German.	1.50
75-76 PB L 70417	Polyamides. Recovery of lactam. By Krumbein. Oct 30, 1944. In German.	1.50
77-93 PB L 70417	"Soromin" - emulsions. By Zankl. Oct 23, 1944. In German.	2.00
94 PB L 70417	Perlon fiber. Test of a new tanning agent. By Müller. Oct 21, 1944. In German.	1.50
95-96 PB L 70417	Processing "Perlon" fiber. By Krumbein. Oct 19, 1944. In German.	1.50
97-98 PB L 70417	Manufacture of "Perlon" fiber. By Spencker. Nov 17, 1944. In German.	1.50
99-101 PB L 70417	Tanning agents for "Perlon" fiber. By Mueller. Oct 12, 1944. In German.	1.50
102-106 PB L 70417	Testing of "Perlon" fiber. By Zankl. Oct 11, 1944. In German.	1.50
107-108 PB L 70417	Perlon fiber polymerization tests. By Sauer. Oct 11, 1944. In German.	1.50
109-114 PB L 70417	Laboratory tests with "Perlon" fiber. By Müller and Krumbein. Apr 7, 9, 1944. In German.	1.50
115-122 PB L 70417	Absorption power of "Perlon" fiber. By Sauer. Oct 6, 1944. In German.	1.50
123 PB L 70417	Preparation of "Perlon" fiber with a phenolic condensation product. By Müller. Oct 5, 1944. In German.	1.50
124-134 PB L 70417	"Perlon" fiber, Increase of capillary activity. By Zankl. Oct 3, 1944. In German.	1.50
135-136 PB L 70417	Volatility of caprolactam. By Krumbein. Oct 3, 1944. In German.	1.50
137-141 PB L 70417	Processing of "Perlon" fiber. By Müller. Sep 20, 1944. In German.	1.50
142-155 PB L 70417	Determination of the constituents of Perlon fiber. By Krumbein. Aug 29, Sep 6, 14, 1944. In German.	1.50
156-166 PB L 70417	Physical testing of "Perlon" fiber. By Sauer. Aug 29, 1944. In German.	1.50
167 PB L 70417	Testing epsilon - aminocaproic acid. By Krumbein. Aug 25, 1944. In German.	1.50
168 PB L 70417	Supply of "Perlon" fiber. Aug 18, 1944. In German.	1.50
169-170 PB L 70417	Cleaning "Perlon" fiber spinning nozzles. By Krumbein. Jul 29, 1944. In German.	1.50
171-172 PB L 70417	Perlon fiber sulfone tanning agent. By Spencker. Jul 29, 1944. In German.	1.50
173-177 PB L 70417	Perlon fiber spinning machines. By Mediger. Jul 15, 21, 1944. In German.	1.50
178-181 PB L 70417	Testing tanning agents for "Perlon" fiber. By Müller. Jul 14, 1944. In German.	1.50
182-191 PB L 70417	Spinning tests with polyurethane. By Sauer. Jul 8, 1944. In German.	1.50
192-194 PB L 70417	Decomposition of polyamide wastes. By Sauer. Jul 8, 1944. In German.	1.50
195-197 PB L 70417	Viscosity of polyurethane melts. By Sauer. Jul 6, 1944. In German.	1.50
198-200 PB L 70417	Perlon constituents. By Krumbein. Jul 5, 1944. In German.	1.50
201-202 PB L 70417	"Perlon" fibers. Manufacturing problems. By Spencker. Jul 3, 1944. In German.	1.50
203 PB L 70417	Purifying "Perlon" fibers. By Müller. Jun 23, 1943.	1.50
204-207 PB L 70417	Sulfonic tanning material for Perlon fibers. By Müller. Jun 20, 1944. In German.	1.50
208 PB L 70417	Determination of "Perlon" fibers constituents. By Krumbein. Jun 6, 1944. In German.	1.50
209 PB L 70417	Perlon fibers. Determination of polymeric hexamethylene adipamide. By Krumbein. Jun 16, 1944. In German.	1.50

210-211 PB L 70417 "Perluran". By Krumbein. May 30, 1944. In German. 1.50

212-216 PB L 70417 Improvement made in "Tanigan DLN", a tanning agent. By Müller. May 26, 1944. In German. 1.50

217-224 PB L 70417 Perlon fibers. Production figures Jan 1943 - Apr 1944. By Spencker. May 18, 1944. In German. 1.50

225-229 PB L 70417 Tests on "Perlon" fibers. By Sauer. May 11, 1944. In German. 1.50

230-251 PB L 70417 Processing "Perlon" fibers. May 6, 1944. In German. 2.50

252-257 PB L 70417 Polyurethane. By Sauer. May 10, 1944. In German. 1.50

258 PB L 70417 Stretching "Perlon" fibers. By Spencker. May 9, 1944. In German. 1.50

259-262 PB L 70417 Polymerization of "Perlon" fibers. By Sauer. Apr 13, 1944. In German. 1.50

263-265 PB L 70417 Processing of "Perlon" fibers. By Müller. Mar 27, 1944. In German. 1.50

266-275 PB L 70417 Processing of "Perlon" fibers. By Spencker. Mar 20, 1944. In German. 1.50

275-279 PB L 70417 Perlon fibers. Decomposition of dimeric lactam. By Sauer. Apr 18, 1944. In German. 1.50

280-281 PB L 70417 Determination of moisture in polyamides. By Müller. Apr 24, 1944. In German. 1.50

282-284 PB L 70417 Processing of "Perlon" fibers. By Spencker. Apr 21, 1944. In German. 1.50

285-286 PB L 70417 "Perlon" fibers. Colorimetric determination of epsilon caprolactam. By Krumbein. Apr 13, 1944. In German. 1.50

287 PB L 70417 Drying of "Perlon-L". By Spencker. Mar 27, 1944. In German. 1.50

288-290 PB L 70417 Polyurethane polymerization. By Spencker. Mar 7, 1944. In German. 1.50

291-294 PB L 70417 Perlon-L polymerization. By Sauer. Mar 24, 1944. In German. 1.50

295 PB L 70417 "Perlon-L". Recovery of caprolactam. By Krumbein. Feb 18, 1944. In German. 1.50

296 PB L 70417 Curling of "Perlon" fibers. By Krumbein. Feb 18, 1944. In German. 1.50

297-299 PB L 70417 Trimeric caprolactam polymers. By Krumbein. Feb 7, 1944. In German. 1.50

300-303 PB L 70417 Perlon fibers manufacturing problems. By Sencker. Jan 29, 1944. In German. 1.50

304-352 PB L 70417 Rayon - Rayon staple. By Zetsche. Feb 1940. In German. 5.00

353-361 PB L 70417 Absorption of moisture by "Perlon". By Miehlich. Dec 28, 1944. In German. 1.50

362-429 PB L 70417 Rayon staple and "Perlon" fibers. Nov 20, 1944. In German. 7.00

430-433 PB L 70417 Absorption of moisture by "Perlon". By Schwarzel. Apr 3, 1944. In German. 1.50

434-435 PB L 70417 Perlon fiber for electrolytic diaphragms. By Spencker. May 20, 1943. In German. 1.50

436-442 PB L 70417 Washing tests of "Perlon" fiber. By Ludewig and Schiele. Mar 27, 1943 and Mar 4, 1943. In German. 1.50

443-444 PB L 70417 Comments by the users of "Perlon" fiber. By Schiele. Jan 4, 1943. In German. 1.50

445-453 PB L 70417 Washing tests of "Perlon" fiber. By Schiele. Dec 18, 1942. In German. 1.50

454-461 PB L 70417 Perlon fiber. Treatment with synthetic tanning agents. By Müller. Dec 14, and Sep 29, 1942. In German. 1.50

462-467 PB L 70417 Testing of "Perlon" fiber. By Spengler. Sep 4, 1942. In German. 1.50

468 PB L 70417 Curling of "Perlon" fiber. By Meissenberg. Sep 11, 1942. In German. 1.50

469-483 PB L 70417 Treatment of "Perlon" fiber with tannin. By Müller. Jul 27 and Jun 17, 1942. In German. 1.50

484-491 PB L 70417 Testing of "Perlon" fiber. By Schiele. Jun 11, 1942. In German. 1.50

492-504 PB L 70417 Testing of "Perlon" fiber. By Schiele. Jun 8, 1942. In German. 1.50

505-506 PB L 70417 Treatment of "Perlon" fiber with tannin. By Müller. May 29, 1942. In German. 1.50

507-509 PB L 70417 Perlon fiber. Problems of manufacturing. By Spencker. Apr 30, 1942. In German. 1.50

510-514 PB L 70417 Manufacture of "Perlon" fiber. By Schiele. Apr 23, 1942. In German. 1.50

515-516 PB L 70417 Opening of "Perlon" fiber. By Schiele. Jan 20, 1942. In German. 1.50

517-521 PB L 70417 Working of "Perlon" fiber. By Braun. Sep 30, 1941. In German. 1.50

522 PB L 70417 Twisting tests on "Perlon" fiber. By Eller. Jul 3, 1941. In German. 1.50

523-545 PB L 70417 Curling of "Perlon" fiber. By Spencker. Jun 1, 1944. In German. 2.50

546-565 PB L 70417 "Perlon" fiber. Recovery of epsilon caprolactam. Mar 11, 1944. In German. 1.50

566-576 PB L 70417 Process for the production of monomeric epsilon caprolactam. Patent application I 78 213 IVc/12p, Sep 12, 1944. In German. 1.50

577-583 PB L 70417 Production of polyamides. By Spencker. Aug 26, 1944. In German. 1.50

584-590 PB L 70417 Polyamides. Polymerization of lactams. By Spencker. Sep 13, 1944. In German. 1.50

591-594 PB L 70417 Polyamides. Polymerization of caprolactam. By Spencker. Aug 31, 1944. In German. 1.50

595-621 PB L 70417 Process for the improvement of fibers from synthetic linear high polymers with amide groups in the chain. By Spencker. May 9, 1944. In German. 1.50

622-624 PB L 70417 Curling of polyurethane. By Sauer. Jan 20 and Mar 11, 1944. In German. 1.50

625-632 PB L 70417 Identical to 595-621

633-642 PB L 70417 Device for measuring the pressure of artificial resin melts flowing through heated pipes wherein a gas (pressure) chamber is connected to the pipe. By Spencker. Aug 14, 1943. In German. 1.50

643-758 PB L 70417 Processing of polyamides. Patent application I.72 756 IVd/8k. By Müller and others. Jul 17, 1942. In German. 12.00

759-832 PB L 70417 Process for improving shaped materials from synthetic linear thread-forming polyamides wherein the shaped materials are treated with solutions of aromatic dioxy compounds and additionally with

aliphatic aldehydes. Patent application I 72 767 IVc/30c. Jul 18, 1942. In German. 7.50

833-854 PB L 70417 Process for recovering epsilon-caprolactam from polyamides wherein the polyamide is heated in the presence of phosphoric acid at temperatures above 240° and below 300° and the lactam formed is distilled under vacuum. Patent application I 76 447 IVc/12p. Dec 16, 1943. In German. 2.50

855-865 PB L 70417 Process for the improvement of textiles of polyamide wherein they are treated with hot aqueous solutions of epsilon - caprolactam if necessary in mixture with low polymers. Patent application I 77 079 IVd/8k. Mar 21, 1944. In German. 1.50

PB L 70417-S. I.G. FARBENINDUSTRIE A.G., BOBINGEN, GERMANY. "Perlon". (FIAT Microfilm Reel E 14, Frames 1-865, abstract cards). 1940-1944. 106p.
Prices: Microfilm-$3.00 - Photostat-$7.00.
These are abstract cards for the above FIAT microfilm reel E 14, PB 70417, prepared by FIAT personnel in Germany.

PB L 70331. SCHEIBER, J. Chemistry and technology of synthetic resins. (FIAT Microfilm Reel BB 110, Frames 1-667) 1943. 667 f. Price: Microfilm-$6.00 - Enlargement print-$67.00
This is a manual on resins. It deals in detail with their properties resulting from their molecular structures, and describes in a systematic way all known polymerization and condensation resins and the processes for their production. A complete bibliography is included, also a complete index of subject matter of the book, of authors mentioned, and of patents in the field. In German.

PB L 19857-S. SEIDEL, G. The status of emulsion polymerization of chloroprene. (Supplement to PB 19857) Jun 1944. 22 p. Price: Microfilm-$1.00 - Photostat-$2.00
This report is a supplement to "German neoprene," abstracted in the Bibliography, vol. 1, p. 1519. A review of the recent development of the emulsion polymerization of chloroprene is given. The effects of low and high temperatures on the product (during the process) are described. They are attributed to the different mechanism of polymerization. Also the influence of catalysts and regulators is discussed. The present status of emulsion polymerization is characterized by the fact that it is carried out at 50° C. and that the alkaline bath contains only "Nekal" as emulsifying agent, while linseed oil fatty acid is not used. Tables and diagrams are included. The report is followed by a discussion and a supplement. In German.

PB L 70348. WACKER, ALEXANDER, G.M.B.H., BURGHAUSEN, GERMANY. Preliminary and intermediate products for the preparation of plastics. (Drawing) (FIAT Microfilm Reel C 19, Frames not numbered) 1935. 170 f.
Price: Microfilm-$2.50 - Enlargement print-$17.00
This FIAT microfilm reel contains drawings of various installations of the firm Alexander Wacker in Burghausen, Bavaria, 1935-1940. Most of these drawings are not very legible and may reproduce poorly. In German. A few flow sheets of Wacker processes, prepared in 1946, are added. These are in English.

Chemical Engineering and Equipment

PB L 73954. ANORGANA G.M.B.H., GENDORF, GERMANY. Flowsheets for chemical plants. (FIAT Microfilm Reel AA 225, Frames 1-12) 1945-1946. 20 f. Price: Microfilm-$1.00 - Enlargement print-$2.00
This microfilm reel presents flowsheets for the production of mercury, production and purification of acetaldehyde, wet and dry processes for acetylene, ethylene, ethylene glycol, diglycol and triglycol, and for Lupolen (polyethylene). Drawings of a bell-bottom column are included. The plant layout of the Anorgana works is given, the plant units identified by number only. No text is given. In German.

PB L 73498. DEUTSCHE GESELLSCHAFT FÜR CHEMISCHES APPARATEWESEN, E. V., FRANKFURT AM MAIN, GERMANY. Chemical process control. (FIAT Microfilm Reel CC-188, Frames 1-345) 1940-1944. 345 f. Price: Microfilm-$4.25 - Enlargement print-$34.50.
This microfilm reel was prepared by FIAT personnel in Germany. The reports are of the Deutsche Gesellschaft für chemisches Apparatewesen e. V. DECHEMA under the Forschungs und Beratungsstelle für Physikalisch-Chemische Betriebskontrolle und Laboratoriumstechnik (F.B.B.K.). 32 individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $4.25. Please include PB and frame numbers when ordering individual items from this microfilm reel.
In German.

Frames	Title	Price
1-2 3-30 PB L 73498	Summary of film in English. Automatic control of the acidification of alcohol in the FRINGS-generators for vinegar production. By Peter Wulff. Jul 11, 1942 and Sep 20, 1942. In German.	$1.50
31-38 PB L 73498	Experiments to test the suitability of dielectric methods for the determination of the water content in acetone. By Peter Wulff. May 14, 1942. In German.	1.00
39-49 PB L 73498	Determination of moisture with the aid of dielectric methods. By Peter Sulff. Sep 10, 1941. In German.	1.00
50-53 PB L 73498	Elucidation of the relation between water content and dielectric losses in water absorbing substances. By Peter Wulff. Nov 30, 1940. In German.	1.00
54-59 294-298 PB L 73498	Testing of membranes for temperature regulators. Jun 4, 1943 and Mar 20, 1944. In German.	1.00
60-65 PB L 73498	Temperature regulation of a test room. Sep 24, 1940. In German.	1.00
66-71 PB L 73498	Testing the suitability of the antimony electrode for the control of a precipitation process. By Peter Wulff. Sep 25, 1940. In German.	1.00
72-112 PB L 73498	Comparison of various colorimetric methods for the determination of nickel with regard to sources of error due to the presence of other alloying components of steel. By Aage Lundberg. Dec 10, 1942. In German.	4.50
113-120 PB L 73498	Control of the pH value and of the concentration of active bleaching agents in bleaching liquors by electrochemical methods. By Peter Sulff. Jun 5, 1943. In German.	1.00
121-131 PB L 73498	Comment of the research and advisory board for physical-chemical control of technical operations and laboratory technique (F.B.B.K.) of the DECHEMA on the letter of the AEV (Committee for Standards and formulas) dated 26 Aug.	

1941, concerning task 28, content of solutions (DIN 1310). Nov 10, 1941. In German. 1.50

153-161 PB L 73498 Testing of the viscocrumb on its applicability for absolute viscosity measurements. Aug 22, 1941. In German. 1.50

162-152 PB L 73498 Analysis of a gaseous mixture, in which ethylene is the principal component. Dec 3, 1941. In German. 1.50

153-160 PB L 73498 Conductivity investigation for clarifying the question of the binding proportions in aqueous solutions of theophylline and diethanolamine. Jan 9, 1943. In German. 1.50

161-165 PB L 73498 Cryoscopic investigation to clear up the question o f the binding proportions in aqueous solutions of theophylline and diethanolamine. Jan 19, 1943. In German. 1.50

166-170 PB L 73498 Experiences on the employment of the MOLLER thermostat in operations involving the control of technical operations, especially the control of temperature of electrode systems. By Peter Sulff. Nov 30, 1942. In German. 1.50

171-178 PB L 73498 Relation between pH-value and temperature of aqueous solutions. By Peter Wulff. Oct 27, 1941. In German. 1.50

179-184 PB L 73498 A rapid method for the neutralisation of protein hydrolysates. Nov 15, 1943. In German. 1.50

185-189 PB L 73498 Examination of an inventive proposal "Slag wool filtration and exsiccation funnel with regenerating dessicator" by Theo Werner, Gladbeck. By Peter Wulff. Aug 28, 1942. In German. 1.50

190-194 PB L 73498 Testing of a dialcometer made by Messrs. HAARDT & Co. for the purpose of determining moisture according to the Brinnermethod. Apr 9, 1942. In German. 1.50

195-204 PB L 73498 Control of operations in vinegar production by conductivity measurements. Nov 17, 1941. In German. 1.50

205-212 PB L 73498 Development of a method for the rapid analysis of vinasse and crude potash from beet vinasse. Jul 19, 1941. In German. 1.50

213-222 PB L 73498 Investigation for the determination of lithium in ore residue. Nov 10, 1941. In German. 1.50

223-273 PB L 73498 A new rapid method for the determination of moisture in loose bulk goods, especially in grain. By Peter Wulff. Jun 30, 1940, Nov 30, 1940, Jun 23, 1941 and Feb 28, 1942. In German. 5.50

274-288 PB L 73498 Colorimetric-photometric analysis of light metal alloys. By Peter Wulff. Sep 24, 1943. In German. 1.50

289-293 PB L 73498 Test for traces of water in gaseous hydrogen chloride. Feb 18, 1942. In German. 1.50

294-298 PB L 73498 See abstract No.: CC 158 / 54-59.

299-319 329-331 Three reports on the development of rapid testing of bromine by cryscopic

332-340 PB L 73498 methods. By Peter Wulff. May 13, 1942, Jun 19, 1942 and Jul 7, 1942. In German. 3.50

320-328 PB L 73498 Report on experiments for the development of an electrolytic thermoelement with the voltage largely dependent on the temperature. Nov 28, 1942. In German. 1.50

329-340 PB L 73498 See frames 299-319.

341-345 PB L 73498 Control of technical operations in textile finishing plants (bleaching process). Dec 31, 1941. In German. 1.50

PB L 73498-S. DEUTSCHE GESELLSCHAFT FÜR CHEMISCHES APPARATENWESEN, E. V., FRANKFURT AM MAIN, GERMANY. Chemical process control. (FIAT Microfilm Reel CC-158, Frames 1-345, abstract cards). 1940-1944. 31 p. Price: Microfilm-$1.00 - Photostat-$3.00.
These are the abstract cards of the above FIAT microfilm reel CC-158, PB 73498, prepared by FIAT personnel in Germany.

PB L 87360. HUSMANN, WILHELM. Chemical problems in agricultural sewage purification. 1941. 14 p. Price: Microfilm-$1.25 - Photostat-$2.00
This document is a reprint from "Deutsche Wasserwirtschaft," Jg. 36 (1941), H. 9, p. 461-466. The author, in analyzing the chemical aspect of sewage purification for the purpose of agricultural utilization, discusses the yield of humus in the first place. He concludes that, with regard to this, biological purification plays an important part among the various methods. He then compares the effect of biological purification carried out by large-scale "verregnung," dam irrigation, and incline irrigation. A diagram is attached which shows a plan for a sewage purification plant for an airdrome construction plant. In German.

PB L 86822. IMHOFF, KARL. Biological production of gas from wastes. Mar 1944. 4 p. Price: Microfilm-$1.00 - Photostat-$1.00
This is a newspaper article which essentially reviews A.M. Buswell's (U.S.A.) research work in the field of production of gas by bacterial fermentation of wastes. A description of the fundamental bottle experiments, by which the process is studied, is given. The bottle is partly filled with the waste material, water is added in an amount according to the original water content of the starting material, and the mixture is inoculated with bacteria from a specimen of already fermenting material. The advantage of the invertable bottle is explained. The economy of the application of these experiments to practical use on farms with the purpose of obtaining methane for illumination and power is discussed. In German.

PB L 86836. IMHOFF, KARL. Biological recovery of gas from wastes. 1944. 1 p. Price: Microfilm-$1.00 - Photostat-$1.00
This is a reprint from "Rundschau Deutscher Technik" No. 516, March 16, 1944, p. 4. The development and fundamentals of Buswell's process for the bacterial production of methane from wastes is reviewed. The application thereof to German conditions, particularly on farms and in various industries, is discussed from the technical and economical view point. In German.

PB L 86825. IMHOFF, KARL. Fermentation tests in bottles. 1945. 2 p. Price: Microfilm-$1.00 - Photostat-$1.00
This is a reprint from "Chemikerzeitung," Jan 17, 1945, p. 12. The fermentation tests described here serve to study the proc-

ess of biological production of methane from agricultural and industrial wastes for illumination and fueling purposes. Essential steps are (1) introduction of the starting material into the bottle; (2) inoculation of the content with bacteria from prefermented matter; (3) maintenance of a definite nitrogen content and a definite temperature. Other important points are prevention of collection of floating substances and scum formation on the surface, and avoidance of acid fermentation. The experimental results are applied to large scale plants in respect to the yield of a given waste material, the quality of the formed gas and the performance and load of fermentation chambers. In German.

PB L 86814. IMHOFF, KARL. Sewer gas from wastes. 1944. 35 p. Price: Microfilm-$1.75 - Photostat-$4.00
This folder contains instructions for the installation of fermentation plants with the purpose of utilising waste materials for the production of fuel gas. The principle of this process is the continuous alkaline fermentation of organic matter to carbon dioxide and methane by bacterial action under special conditions of storage. Adequate water supply, a minimum amount of nitrogen and optimum temperature are essential factors for a successful reaction. A detailed description of the operation of a plant, which is advantageously set up on farms, is given including a list of individual waste substances and their yields. Several models of fermentation chambers and their operation are explained. Calculation tables as to the economy of the process are included. In German.

PB L 88154. KRAUSS MAFFEI A. G., MUNICH, GERMANY. Prints: "Filter centrifuge" 2000 Trd. F 359, and assembly of centrifuge 2000 Trd. F 341. (F. D. 311/47; B. O. 98/48) Jun 1941. 32 p. Price: Microfilm-$1.75 - Photostat-$4.00
These are drawings for the above two centrifuges.

PB L 86411. LURGI GESELLSCHAFT FÜR WARMETECHNIK M.B.H., FRANKFURT AM MAIN, GERMANY. Lurgi pressure gasification installations. n. d. 12 p. Price: Microfilm-$1.25 - Photostat-$2.00
This is a booklet describing Lurgi gas production methods, and processes of the Lurgi pressure synthesis. In German.

PB L 86391. MASCHINENFABRIK AUGSBURG-NÜRNBERG A. G., AUGSBURG, GERMANY. M.A.N. Waterless gasholder development and progress. [1938.] 37 p. Price: Microfilm-$1.75 - Photostat-$4.00
This trade catalog lists sites where waterless gasholders are installed in England, Germany and the United States. The various characteristics of M.A.N. gasholders are described and photographs and testimonials are included. In English.

PB L 70156. RUHRCHEMIE A. G., OBERHAUSEN-HOLTEN, GERMANY. Drawings for installation "F" at Ruhrchemie, Oberhausen-Holten. (FIAT Microfilm Reel L 4, Frames 1199-1397) 1939-1944. 198 f. Price: Microfilm-$2.75 - Enlargement print-$20.00
Further drawings of various installations of Ruhrchemie A. G. and Ruhrbenzin A. G., Oberhausen-Holten, 1939-1944, are reproduced here. Some of them are not very legible. In German.

PB L 70157. RUHRCHEMIE A. G., OBERHAUSEN-HOLTEN, GERMANY. Gasoline synthesis according to Fischer-Tropsch at Ruhrchemie in Oberhausen. (Drawings) (See also FIAT Microfilm Reel L 2, PB L 70156) (FIAT Microfilm Reel L 3, Frames 560-1198) 1936-1944. 638 f. Price: Microfilm-$6.00 - Enlargement print-$64.00
This reel contains further drawings of various installations at Ruhrchemie A. G. and Ruhrbenzin A. G., 1936-1944. Some of the drawings are not very clearly reproduced. In German.

PB L 70156. RUHRCHEMIE A. G., OBERHAUSEN-HOLTEN, GERMANY. Gasoline synthesis according to Fischer-Tropsch at Ruhrchemie in Oberhausen. (Drawings) (See also FIAT Microfilm Reel L 3, PB L 70157) (FIAT Microfilm Reel L 2, Frames 1-559) 1937-1944. 559 f. Price: Microfilm-$6.00 - Enlargement print-$56.00
This film contains drawings of various installations at Ruhrchemie A. G. and Ruhrbenzin A. G., 1937-1944. Some of the drawings are not very clear and will not reproduce well. In German.

PB L 86392. SCHÜTZE A. G., OGGERSHEIM, GERMANY. Our manufacturing program. n. d. 6 p. Price: Microfilm-$1.00 - Photostat-$1.00
This brochure illustrates the equipment manufactured by this firm which includes cast products, piping, pressure vessels, autoclaves, agitators, acid pumps, reaction kettles, enamel and rubber lined equipment. In German.

PB L 88153 SIEBTECHNIK G.M.B.H., MÜLHEIM-RUHR, GERMANY. The continuous filter centrifuge "Rekord." (F. D. 309/47; B. O. 4123/47) Jan 1942. 8 p. Price: Microfilm-$1.00 - Photostat-$1.00
This document consists of a description in German of the characteristics of the "Rekord" centrifuge and description of its construction. The centrifuge can be used for salts wherein crystals are above .15 mm in size, solutions containing fibers up to 10 cm in length and for fruit juices. Two prints of the centrifuge, a table comparing efficiencies of types of centrifuges, a list of sample centrifuging problems and a one-page illustrated circular of the device are included.

PB L 73521. SILICA GEL GESELLSCHAFT, BERLIN. Plant for solvent recovery. (FIAT Microfilm Reel BB 190, Frames 1-32) 1942-1945. 32 f. Price: Microfilm-$1.25 - Enlargement print-$3.50
The "Silica-gel" and "Silicarbon" processes for continuous recovery of volatile solvents are described and illustrated by drawings. In German.

*PB L 86267. TONGUE, R. G. The Hansa Mühle continuous solvent extractor. (BIOS Final Rept 1394, Item 22, 31). Feb 1946. 8 p. Price: Microfilm-$1.00 - Photostat-$1.00
The company had two main interests, (a) the extraction and processing of oils from oil seeds, including the manufacture of lecitin; (b) the manufacture of machinery for processing oil seeds and especially for the continuous solvent extraction of oil seeds. This investigation was concerned with the details of continuous solvent extraction. The general description of the process and plant is given in the catalogue, a copy of which was obtained but is not included in this report. However, the remarks are an amplification of the description both from the process and plant view points. Table 1 shows the overall dimensions of the plant, the nominal throughput of the plant and the number and size of buckets used. Table 2 gives the process data and the number of solvent recovery units required for a plant of a nominal capacity of 100 tons per day. Attached is a list of copied documents.

PB L 73479. ANORGANA G. M. B. H. GENDORF, GERMANY. Miscellaneous reports. (FIAT Microfilm Reel B 36, Frames 44611-46525). 1932-1943. 957 f. Price: Microfilm-$6.00 - Enlargement Print-$96.00.
This microfilm reel was prepared by FIAT personnel in Germany. 25 individual items are listed below and will be available as enlargement prints. The entire reel may be obtained as a microfilm for $6.00. Please include PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
44611-44795 PB L 73479	Monthly report of I.G. Leverkusen. Nov - Dec 1932. In German.	$18.50
44796-45246 PB L 73479	Monthly report of I.G.Leverkusen. 1933. In German.	45.50
45247-45647 PB L 73479	Monthly reports of I.G.Leverkusen. 1934. In German.	40.50
45648-45880 PB L 73479	Monthly reports of I.G. Farben. 1936. In German.	23.50
45881-46296 PB L 73479	Monthly reports of I.G. Farben. 1935. In German.	41.50
46297-46332 PB L 73479	Possibilities of research in industrial chemistry. By F. Ebel. Nov 16, 1940. In German.	42.00
46333 PB L 73479	Tetrahydrofuranperoxides. By Reppe. Mar 30, 1942. In German.	1.50
46334-46339 PB L 73479	Process for the continuous dehydration of tetrahydrofuran. By v. Kutepow and Hrubesch. Apr 22, 1940. In German.	1.50
46340-46344 PB L 73479	Deposits from the tubes of the furan furnace. Apr 28, 1941. In German.	1.50
46345-46365 PB L 73479	Tetrahydrofuran production. By Moeller. Feb 21, 1942. In German.	2.50
46366-46370 PB L 73479	Catalytic hydrogenation of 1,4 butinediol to 1,4 butenediol. Jul 1938. In German.	1.50
46371 - 46394 PB L 73479	Rapid titrimetric microanalysis of sulfur in organic and inorganic substances. By Wilhelm Zimmermann. Oct 1, 1942. In German.	2.50
46395-46411 PB L 73479	Determination of phosphorus trichloride, phosphorus oxychloride and thionyl chloride in their mixtures. By B.Wurzschmitt and Fr.Machek. Jan 14, 1943. In German.	2.00
46412 -46420 PB L 73479	Rapid titrimetric analysis of the total sulfur in roasted pyrites. By Wilhelm Zimmermann. Mar 1, 1943. In German.	1.50
46421-46425 PB L 73479	Determination of sulfuryl chloride, chlorine and SO_2 in gases containing them. By Bernhard Wurzschmitt. Mar 12, 1943. In German.	1.50
46426-46433 PB L 73479	Analysis of mixtures of ammonia, mono- di- and trimethylamine. By B. Wurzschmitt. Mar 17, 1943. In German.	1.50
46434-46439 PB L 73479	Determination of small quantities of phosphorus oxychloride in thionylchloride of high strength. By Friedrich Machek. Feb 26, 1943. In German.	1.50
46440-46452 PB L 73479	High molecular weight fatty acid derivatives. By Henry Gilman and Grover M.Ford. Dec 7, 1938. In German. Several derivatives useful for the characterization of lauric, myristic, palmitic and stearic acids have been described.	1.50
46453-46454 PB L 73479	n-Butane-disulfonic-acid-(1,4). By Burckhardt and others. Jul 24, 1941. In German.	1.50
46455-46456 PB L 73479	Production of tetraethyl lead. In German.	1.50
46457-46464 PB L 73479	Metal carbonyls. In German.	1.50
46465-46490 PB L 73479	Aza compounds as dyestuff intermediates. By Kunz and others. Oct 22, 1934. In German.	3.00
46491-46505 PB L 73479	Vat dyestuffs from azabenzanthrones. By Kunz and others. Oct 24, 1934. In German.	1.50
46506-46509 PB L 73479	Pyridine compounds of anthraquinone. By Kunz and others. n.d. In German.	1.50
46510-46525 PB L 73479	Final report. By Pyzik. Jul 1, 1943. In German.	2.00

PB L 73479-S. ANORGANA G.M.B.H., GENDORF, GERMANY. Miscellaneous reports. (FIAT Microfilm Reel B 36, Frames 44611-46525, abstract cards). 1932-1943. 25 p.
Price: Microfilm-$1.00 - Photostat-$2.00.
Brief abstracts of the individual items on the above FIAT microfilm reel, B 36, PB 73479, prepared by FIAT personnel in Germany.

PB L 70345. ANORGANA G.M.B.H., GENDORF, GERMANY. Reports in textile chemistry. (FIAT Microfilm Reel C 16, Frames 17991-18960) 1933-1944. 970 f. Price: Microfilm-$6.00 - Enlargement print-$97.00
This reel was prepared by FIAT investigators in Germany. 37 individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $6.00. Please include PB and frame numbers when ordering individual items. In German.

Frames	Title	Price
17991-18002 PB L 70345	White laundry problem based on surface contact research. By Amende. Jun 16, 1937. In German. These frames follow Frame 18186 on reel.	$1.50
18003-18007 PB L 70345	Fatty alcohol sulfonates. By Wappes and Limbacher. Jun 1, 1937. In German.	1.50
18008-18011 PB L 70345	Solvent preparations. By Wappes and Limbacher. Jun 1, 1937. In German.	1.50
18012-18017 PB L 70345	"Ramasit." By Hengstenberg. Jun 1, 1937. In German.	1.50
18018-18024 PB L 70345	Course of the washing process based on turbidity measurements. By Dürr. Jun 14, 1937. In German.	1.50
18025-18027 PB L 70345	Hydroxyethylation products. By Wietzel. Jun 23, 1937. In German.	1.50

18028 PB L 70345 — This frame is missing.

18029-18057 PB L 70345 — Phosphate washing agents. By Stade. Apr 25, 1937. In German. 3.00

18058-18062 PB L 70345 — Condensation products of polycarboxylic acid amides with formaldehyde. By Bunnel. Jun 14, 1937. In German. 1.50

18063-18068 PB L 70345 — The effect of textile washing agents on lime salt precipitates. By Heidenaleben. Jun 15, 1937. In German. 1.50

18069-18081 PB L 70345 — Wollstra--dyes. By Krzikalla and Alt. Nov 6, 1936, May 14, 1937. In German. 1.50

18082-18087 PB L 70345 — Naphthol AS derivatives. By Krzikalla and Alt. May 13, 1937. In German. 1.50

18088-18094 PB L 70345 — Water softening agents. By Valko. Jul 8, 1937. In German. 1.50

18095-18101 PB L 70345 — Perborate containing washing agents. By Schwen. Aug 20, 1937. In German. 1.50

18102-18176 PB L 70345 — Chronological order of the washing process based on turbidity measurements. By Duerr. Nov 3, 1937. In German. 7.50

18177-18181 PB L 70345 — Calcium complex salt of Trilon B as water softening agent. By Ender. Nov 25, 1937. In German. 1.50

18182-18186 PB L 70345 — Testing "Igleyer," "Sekurit," and "Marpuranan" used as textile washing agents. By Heidenaleben. Dec 3, 1937. In German. 1.50

18186A-18193 PB L 70345 — Condensation products from croton-aldehyde. By Schmidt and Thewalt. Apr 14, 1937. In German. 1.50

18194-18196 PB L 70345 — A simple manufacturing method for primary aromatic amines containing high molecular alkyl groups. By Baeumler. Feb 9, 1938. In German. 1.50

18197-18212 PB L 70345 — Sulfonation of sperm oil alcohol. By Haussmann and others. Feb 8, 19, 1938. In German. 2.00

18213-18218 PB L 70345 — Hydrophobing and animalising agents. By Haussmann and Baeumler. Feb 5, 1938. In German. 1.50

18219 PB L 70345 — This frame is missing.

18220-18224 PB L 70345 — Wetting agents. By Haussmann. Feb 17, 1938. In German. 1.50

18225-18228 PB L 70345 — Animalizing products. By Mattausch. Feb 4, 1938. In German. 1.50

18229-18233 PB L 70345 — Amines from paraffin-oxidation fatty acids. By Schmidt and Mattausch. Feb 22, 1938. In German. 1.50

18234-18244 PB L 70345 — Hydrophobing. By Hengstenberg. Feb 17, 1938. In German. 1.50

18245-18253 PB L 70345 — Alcohol sulfonates. By v. Reibnitz. Feb 16, 1938. In German. 1.50

18254-18257 PB L 70345 — Experiments to use colorless anthraquinone derivatives with high molecular alkyl radicals for textile processing. By Valko and Wenning. Feb 21, 1938. In German. 1.50

18258-18261 PB L 70345 — Hydrophobing. By Valko and Wenning. Feb 21, 1938. In German. 1.50

18262-18266 PB L 70345 — Emulsifiers. By Hengstenberg. Feb 22, 1938. In German. 1.50

18267-18270 PB L 70345 — Organic water softening agents. By Floets. Feb 24, 1938. In German. 1.50

18271-18284 PB L 70345 — White laundering agents. By Heinze. 1937. In German. 1.50

18285-18288 PB L 70345 — Paraffin condensates. By Keunecke and Adrainger. Apr 25, 1938. In German. 1.50

18289-18291 PB L 70345 — Paraffin oxidation products. By Harder. Apr 25, 1938. In German. 1.50

18292-18295 PB L 70345 — Paraffin first run fatty acids. By v. Reibnitz. Apr 25, 1938. In German. 1.50

18296-18304 PB L 70345 — Baron staple dyeing. By Schwen. Aug 22, 1938. In German. 1.50

18305-18327 PB L 70345 — Emulsifying process. By Hengstenberg. Jul 30, 1938. In German. 2.50

18328-18340 PB L 70345 — Textile aids based on new intermediate products. By Haussmann and others. Nov 22, 1938. In German. 1.50

18341-18344 PB L 70345 — Textile aids based in the diene synthesis. By Hopff and Rapp. Oct 21, 1938. In German. 1.50

18345-18348 PB L 70345 — Experiments with soap solutions in alcohol-water mixtures. By Wietzel and Duerr. Oct 24, 1938. In German. 1.50

18349-18355 PB L 70345 — Hydrophobing agent. By Haussmann and Graefinger. Oct 28, 1938. In German. 1.50

18356-18363 PB L 70345 — Ethylene imine. Nov 21, 1938. In German. 1.50

18364-18368 PB L 70345 — Preparing agents for textiles. By Ulrich and Kuespert. Nov 21, 1938. In German. 1.50

18369-18378 PB L 70345 — Higher molecular olefines. By Haussmann and Spaeth. Nov 22, 1938. In German. 1.50

18379-18386 PB L 70345 — Sulfonation of cracked olefines. By Haussmann and Fuerhaeuser. Nov 21, 1938. In German. 1.50

18387-18390 PB L 70345 — "Nekals." By Limbacher and Hengstenberg. Oct 22, 1938. In German. 1.50

18391-18395 PB L 70345 — "Ramasites." By Hengstenberg and Siefert. Oct 25, 1938. In German. 1.50

18396-18403 PB L 70345 — Sulfonation. By Wietzel and others. Oct 21, 1938. In German. 1.50

18404-18415 PB L 70345 — Condensation products from ammonium salts, formaldehyde and organic substances, possessing reactive hydrogen atoms. By Krzilla and Armbruster. Oct 25, 1938. In German. 1.50

18416-18434 PB L 70345 — Experimental determination of adsorbed layers of soap. By Rieder. Mar 22, 1939. In German. 2.00

18435-18465 PB L 70345 — Soap solution in mixtures of alcohol and water. By Duerr and Koelbl. Mar 31, 1939. In German. 3.50

18466-18482 PB L 70345 — Betane sulfonic acid A. By Kirsch. Sep 5, 1939. In German. 2.00

18483-18493 PB L 70345 — Sulfochlorides. By Hausemann and Fuerhaeuser. Feb 12, 1940. In German. 1.50

18494-18502 PB L 70345 — Sulfochlorination of hydrocarbons. By Spaeth. Feb 15, 1940. In German. 1.50

18503-18511 PB L 70345 — Fatty acid amides. By Hausemann and Spaeth. Feb 19, 1940. In German. 1.50

18512-18526 PB L 70345 — Waconol-like washing agents for textiles from carbon monoxide hydrogenation products. By Kirsch and Weniger. Feb 14, 1940. In German. 1.50

18527-18531 PB L 70345 — Experiments for the production of sulfonates from olefines. By Fuerhaeuser. Feb 12, 1940. In German. 1.50

18532-18535 PB L 70345 — Producing colorless, water-soluble finishing agents on the basis of polyvinyl compounds. By Fickentscher. Feb 19, 1940. In German. 1.50

18536-18550 PB L 70345 — Sulfochlorides. By Hecht. Dec 20, 1939. In German. 1.50

18551-18560 PB L 70345 — Preserving effect of Nekals and other wetting agents on starch dressings. By Stadler. Oct 1939. In German. 1.50

18561-18567 PB L 70345 — Sulfonation. By Schowalter and Limbacher. Feb 17, 1940. In German. 1.50

18568-18580 PB L 70345 — Mersasin sulfonate. By Smeykal and Asinger. Dec 1939. In German. 1.50

18581-18587 PB L 70345 — Mersol. By Asinger and Schmidt. Jan 1940. In German. 1.50

18588-18593 PB L 70345 — Chlorosulfonic acid chlorides. By Asinger and Boeck. Jan 1940. In German. 1.50

18594-18596 PB L 70345 — Production of alcohols. By Manchen. Apr 16, 1940. In German. 1.50

18597-18601 PB L 70345 — Paraffin oxidation. By v. Reibnitz. Dec 10, 1940. In German. 1.50

18602-18613 PB L 70345 — High molecular alcohols. By Ploetz and others. Mar 11, 1941. In German. 1.50

18614-18618 PB L 70345 — Animal resin (synthetic resin for animalizing artificial fibers). By Ploetz. Mar 7, 1941. In German. 1.50

18619-18624 PB L 70345 — Ethyleneimine. By Stanger and Ender. Mar 13, 1941. In German. 1.50

18625-18628 PB L 70345 — Ethyleneimine. By Stanger and Enders. Mar 18, 1941. In German. 1.50

18629-18632 PB L 70345 — Chlorinated hydrocarbons. By Steinbrunn. Mar 11, 1941. In German. 1.50

18633-18635 PB L 70345 — Dihydroxyethylpiperazine. By Ploetz. Mar 7, 1941. In German. 1.50

18636-18649 PB L 70345 — Formaldehyde. By Stadler. Mar 14, 1941. In German. 1.50

18650-18660 PB L 70345 — Carbamide resin. By Leupin. Mar 3, 1941. In German. 1.50

18661-18671 PB L 70345 — Experiments concerning the change of the surface smoothness of fibers with the aid of preparing agents. By Ender and Biczysko. Mar 15, 1941. In German. 1.50

18672-18683 PB L 70345 — Constitution and washing effect. By Amende. Mar 31, 1941. In German. 1.50

18684-18723 PB L 70345 — Production of washing agents and textile aids from unsaturated hydrocarbon mixtures. By Hausemann and others. Feb 6, 1941. In German. 4.00

18724-18729 PB L 70345 — Washing agents and textile aids made from unsaturated hydrocarbon mixtures. By Hausemann and Spaeth. Feb 7, 1941. In German. 1.50

18730-18736 PB L 70345 — Formation of dialkylacetic acids from olefines. By Hausemann and Spaeth. Feb 7, 1941. In German. 1.50

18737-18744 PB L 70345 — Phenylmesasinsulfonic acid. By Kirsch and others. Jan 8, 1941. In German. 1.50

18745-18754 PB L 70345 — Mineral oils as raw material for washing agents. By Kirsch and Weniger. Jan 6, 1941. In German. 1.50

18755-18765 PB L 70345 — Phenylmesasin. By Kirsch and Weniger. Jan 2, 1941. In German. 1.50

18766-18777 PB L 70345 — Phenylmesasinsulfonic acid. By Kirsch and others. Jan 27, 1941. In German. 1.50

18778-18781 PB L 70345 — Washing agents and textile aids made from unsaturated hydrocarbons. By Schuster and Eulbrecht. Feb 6, 1941. In German. 1.50

18782-18791 PB L 70345 — Washing agent and textile aids made from unsaturated hydrocarbons. By Kroeper and others. Jan 31, 1941. In German. 1.50

18792-18796 PB L 70345 — A method for determining the amount and polymerization degrees of rayon staple and cotton in mixed tissues. By Zimmermann. Mar 28, 1941. In German. 1.50

18797-18808 PB L 70345 — Mechanical properties of textile fibers. By Grether. Mar 25, 1941. In German. 1.50

18809-18827 PB L 70345 — Experiments to substitute the sodium pyrophosphate in washing agents of Persil-like structure. By Duerr and Faber. May 8, 1940. In German. 2.00

18828-18842 PB L 70345 — Experiments for the systematic examination of changes of the washing solution. By Duerr. Aug 15, 1940. In German. 1.50

18843-18861 PB L 70345 — Experiments on the experimental proof of adsorbed soap layers. By Rieder. Mar 22, 1938. In German. 2.00

18862-18878 PB L 70345 — Testing the adsorption of synthetic washing agents. By Rieder. Jun 28, 1940. In German. 2.00

18879-18887 PB L 70345 — Ethyleneimine derivatives. By Ploetz and others. Nov 1941. In German. 1.50

751195 O—48——3 39

18888-18901 PB L 70345 **Phenylaminomethanesulfonic acid.** By Hirsch and others. Nov 1941. In German. 1.50

18902-18915 PB L 70345 **Phenylaminomethanesulfonic acid.** By Weniger. Nov 10, 1941. In German. 1.50

18916-18925 PB L 70345 **Ethylene oxide compounds suitable for textile processing.** By Hartmann. Sep 22, 1941. In German. 1.50

18926-18939 PB L 70345 **Using mono- and diisocyanates for processing of different textile fibers.** By Hartmann. Nov 20, 1941. In German. 1.50

18940-18950 PB L 70345 **Paraffin oxidation.** By Weiss and Haase. Aug 22, 1939. In German. 1.50

18951-18960 PB L 70345 **Soap fatty acids.** May 6, 1940. In German. 1.50
Incomplete. Last 40 frames are on Reel C 17, PB L 70346.

PB L 70345-S. ANORGANA G.M.B.H., GENDORF, GERMANY. **Reports in textile chemistry.** (FIAT Microfilm Reel C 16, Frames 17991-18960, abstract cards) 1933-1944.
99 p. Price: Microfilm-$2.00 - Photostat-$7.00
Brief abstracts of the individual items on the above reel, C 16, PB L 70345, prepared by FIAT personnel in Germany.

PB L 82067. BOEHRINGER, C. H., & SOHN, NIEDER-INGELHEIM, GERMANY. **A collection of progress reports.** (FIAT Microfilm Reel K 123, Frames 907-1804) 1940-1943.
898 f. Price: Microfilm-$7.00 - Enlargement print-$91.00
This microfilm reel contains numerous Progress Reports originating with the laboratories of the above firm, 1940-1943. They relate research chiefly in two fields: (1) Production of pharmaceuticals and intermediates for them; including methods for testing and analyses. (2) Food chemistry, including food colors, fermentation, fruit juices, soft drinks, etc. Many reports deal with substitutes for scarce materials. In many cases, only very brief accounts of the research in question are given. Since each report deals with a number of subjects and the same subjects appear in many consecutive reports, listing by subjects is impossible. Only the entire reel may be obtained either as microfilm or enlargement prints. In German.

PB L 85749. FINDLAY, J. M. (ed.). **Process for the preparation of fire extinguishing agent CB (Chlorobromomethane, N. W. 129.5).** (Science Translation Service Rept 40). May 1947. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00
Method of preparation, yield, and analysis is given.

PB L 85629. FISCHER. **Liquid phase oxidation of ethylidene diacetate.** n. d. 7 p. Price: Microfilm-$1.00 - Photostat-$1.00
A series of tests, undertaken at various temperatures and using various catalysts, show that oxidation of ethylidene diacetate gives poor yields of acetic acid anhydride. It is assumed that before ethylidene diacetate is split into acetaldehyde and acetic anhydride, it combines with oxygen to liberate large amounts of carbon dioxide. In German. Abstract prepared at Headquarters Air Materiel Command, Wright Field, Dayton, Ohio.

PB L 87354. GREVEMEYER, MAX. **Purification of the waste waters of sugar factories.** 1935. 4 p. Price: Microfilm-$1.00 - Photostat-$1.00
This paper discusses the important role of the water resulting from the processing of sugar-beets in the manufacture of sugar, with particular consideration of the percentual amounts recovered during the individual stages. It is explained by what procedures the water is purified and recycled. Part of the water is led into fermentation ponds. The valuable organic substances obtained thereby are used for industrial purposes, while the clarified water is utilized by the factory. Two diagrams are included. In Italian.

PB L 27848. GROSSKINSKY and others. **Effect of small quantities of impurities on the sodium polymerization.** (I. G. Farbenindustrie, Main Laboratory Report) (Frames 6161-6169 of FIAT Microfilm Reel 4 B) Jan 1929. 5 f.
Price: Microfilm-$1.00 - Enlargement print-$1.50
In German.

PB L 70254. I.G. FARBENINDUSTRIE A.G. **Production of organic chemicals.** (FIAT Microfilm Reel A-31, Frames 6875-7614). 1923 - 1945. 799 f. Price: Microfilm-$6.00 - Enlargement Print- $80.00.
This FIAT microfilm reel contains numerous directions for producing organic compounds. Directions for individual compounds, listed below, will be available as enlargement prints. Please include PB and frame numbers when ordering an individual item. These reports are in German.

Frames	Title	Price
6875 - 6879 PB L 70254	6-Amino-3,4-xylenol, 1939 - 1940. In German.	$1.50
6880 - 6883 PB L 70254	5-Mercapto- 4 - acetamido-1, 2-xylene, 1939 - 1940 In German.	1.50
6884 - 6901 PB L 70254	N-Ethyl-p-methoxy thioquinolone iodo-ethylate, and intermediates, 1938. In German.	2.00
6902 - 6923 PB L 70254	N-Ethyl - "thiotolu" quinolone iodo-ethylate, and intermediates, 1938. In German.	2.50
6924 - 6943 PB L 70254	"Alizarin chrome blau FFR" intermediate, 1938-1939. In German.	2.00
6944 - 6946 PB L 70254	Acetyl acetone, 1931-1941. In German.	1.50
6947 PB L 70254	Illegible.	
6948 - 6956 PB L 70254	"Appreturmittel Hö 1/105", 1941-1942. In German.	1.50
6957 - 6959 PB L 70254	Handwritten memorandum concerning 2-ethyl-capronic acid, 1941. In German.	1.50
6960 PB L 70254	"Appreturmittel Hö 1/106". n.d. In German.	1.50
6961-6962 PB L 70254	Ethylisothioacetanilide, 1939. In German.	1.50
6963 PB L 70254	Duplication.	
6964 - 6969 PB L 70254	2-Aminothiazole, 1940. In German.	1.50
6970 - 6977 PB L 70254	Ethylene imine, 1944. In German.	1.50
6978 - 6980 PB L 70254	Ethyl mustard oil, 1940. In German.	1.50
6981 - 6984 PB L 70254	2-Amino -5,6-dimethyl benzo-thiazole, 1937 - 1940. In German.	1.50

Miscellaneous Chemicals (contd)

6985 - 6995 PB L 70254 — Allyldiathyl acetamide. 1940. In German. Partly in handwriting. 1.50

6996 - 6998 PB L 70254 — "Appreturmittel HS. 1/110". 1941-1942. In German. 1.50

6999 PB L 70254 — "Asplit" glue solution II. 1941. In German. Handwritten. 1.50

7000 PB L 70254 — Distillation of crude alkylene xylene. 1942. In German. 1.50

7001 - 7003 PB L 70254 — Alphabetical list of compounds. n.d. In German. 1.50

7004 PB L 70254 — Description of carbazole extraction. 1943. In German. Drawings missing. 1.50

7005 - 7007 PB L 70254 — 2-Chloro-4-sulfo benzoic acid. 1934. In German. 1.50

7008 - 7009 PB L 70254 — 5-Chloro -2-hydroxy benzoic acid amylister. 1934. In German. 1.50

7010 - 7017 PB L 70254 — 1-chloro-4-hydroxy-anthraquinone. 1935-1936. In German. 1.50

7018 - 7020 PB L 70254 — Chloro methyl xylene. 1936. In German. 1.50

7021 - 7031 PB L 70254 — p-Chlorobenzylchloride. 1935. In German. 1.50

7032 PB L 70254 — "Brillant sulfoflavin FF". 1929. In German. 1.50

7033 - 7044 PB L 70254 — "Celliton brillantgelb" 1929 - 1929 - 1937. In German. 1.50

7045 - 7047 PB L 70254 — Calcium stearate. 1934. In German. 1.50

7048 PB L 70254 — Calcium arsenate. 1934. In German. 1.50

7049 - 7057 PB L 70254 — Calcium colophonate. 1934-1939. In German. 1.50

7058 - 7060 PB L 70254 — 2-Chloro-4-methoxy benzyl-chloride. 1936. In German. 1.50

7061 - 7085 PB L 70254 — "Chromechtgelb 8 GL". 1935-1941. In German. 2.50

7086 - 7087 PB L 70254 — o-Nitro benzylchloride. 1937. In German. 1.50

7088 - 7089 PB L 70254 — Hydroxy-trimellitic acid. 1937. In German. Partly in handwriting. See below, 7106. 1.50

7090 - 7094 PB L 70254 — Pseudo cumol -5-sodium sulfonate. 1937. In German. 1.50

7095 - 7097 PB L 70254 — Duplication.

7098 - 7002 PB L 70254 — Sulfotrimellitic acid. 1937. In German. 1.50

7103 - 7105 PB L 70254 — Duplication.

7106 - 7113 PB L 70254 — Hydroxy-trimellitic acid. 1937-1938. In German. 1.50

7114 - 7139 PB L 70254 — Chromoxan brillantrot BL" "Chromrot 187". 1937-1941. In German. 3.00

7140 - 7148 PB L 70254 — 3-Nitro-p-cresol. 1932-1937. In German. 1.50

7149 - 7150 PB L 70254 — Duplication.

7151 - 7154 PB L 70254 — "Cresylechtviolett BB". 1938. In German. 1.50

7155 - 7159 PB L 70254 — Carbonyl-diurea. 1938-1943. In German. 4.50

7160 - 7162 PB L 70254 — Chloranilic acid. 1938. In German. 1.50

7163 - 7166 PB L 70254 — 5-Chloro-2-nitro-benzoic acid. 1937. In German. 1.50

7167 - 7178 PB L 70254 — "Cellitonechtgrün. 5B". 1937-1938. In German. 1.50

7179 PB L 70254 — Precipitation of chloroprene latex. 1944. In German. 1.50

7180 - 7182 PB L 70254 — 5-Chloro-o-cresol. 1938. In German. 1.50

7183 - 7188 PB L 70254 — 4-Chloro-3-nitro anisole. 1937. In German. 1.50

7189 - 7191 PB L 70254 — 3-Chloroaniline -4-sulfonic acid. 1938. In German. 1.50

7192 - 7193 PB L 70254 — "Chromat DH". 1935. In German. 1.50

7194 PB L 70254 — "Chrombrillantrot HD". n.d. In German. 1.50

7195 - 7203 PB L 70254 — 2-Chloro-4-methyl-quinoline. 1939 - 1945. In German. 1.50

7204 - 7206 PB L 70254 — 3-Chloro-phenylhydrazine. 1938. In German. 1.50

7207 PB L 70254 — "Chromblau 214". 1938. In German. Handwritten note. 1.50

7208- 7211 PB L 70254 — m-Nitrobenzoyl-p-aminosalicylic acid. 1938. In German. 1.50

7212 - 7222 PB L 70254 — "Chrombrillant blau BL". 1938. In German. Mostly handwritten. 1.50

7223 - 7226 PB L 70254 — 6-Chloromethyl-1,2,3,4-tetrahydronaphthalene. 1939. In German. 1.50

7227 - 7244 PB L 70254 — 1-Chloro-2-nitrobenzene-4-sulfomethyl anilide. 1938-1939. In German. 2.00

7245 - 7246 PB L 70254 — Chloro acetamide. 1940. In German. 1.50

7247 - 7249 PB L 70254 — "Chromrot 65500". 1939. In German. 1.50

7250 - 7252 PB L 70254 — 3-Chloro-4-nitro-acetanilide. 1938. In German. 1.50

7253 - 7257 PB L 70254 — 3-Chloro-4-nitroaniline. 1942. In German. 1.50

7258 - 7263 PB L 70254 — Chloroparaffin. 1941-1943. In German. 1.50

7264 PB L 70254 — "Chlormepasin". 1941. In German. 1.50

7265 PB L 70254 — Duplication.

7266 - 7267 PB L 70254 — Chloro-dinitrocarbazole. 1941. In German. 1.50

7268 and 7270-7271 PB L 70254 — 6-Nitro-o-toluidine. 1941. In German. 1.50

Miscellaneous Chemicals (contd)

7269 and 7272 PB L 70254 — 2-Chloro-3-nitro-toluene. 1941. In German. 1.50

7273 - 7274 PB L 70254 — 2-Chloro-3-nitro-benzoic acid. 1941. In German. 1.50

7275 - 7276 PB L 70254 — Chloroacetyldiethyl amide. 1943. In German. Handwritten. 1.50

7277 - 7281 PB L 70254 — o-Chlorocyclohexanol. 1941. In German. Partly handwritten. 1.50

7282 - 7285 PB L 70254 — Condensation of xylene and sulfur chloride. 1943. In German. 1.50

7286 - 7291 PB L 70254 — Chrome mordant. 1939 - 1941. In German. 1.50

7292 - 7294 PB L 70254 — "Chlorol T". 1943. In German. 1.50

7295- 7296 PB L 70254 — Carbonyldiurethane. 1943. In German. 1.50

7297 - 7300 PB L 70254 — List of names of compounds. n.d. In German. 1.50

7301 - 7302 PB L 70254 — Syn. N-N'-dimethyl-ethylenediamine hydrochloride. 1934. In German. 1.50

7303 - 7310 PB L 70254 — 1,2-Dichlorobenzene-4-sulfonic acid and barium salt. 1934. In German. 1.50

7311 - 7312 PB L 70254 — 1-2, 7-8-Dibenspyrene -3,6-quinone. 1934. In German. 1.50

7313 - 7314 PB L 70254 — 3,4-Dichloro-nitro benzene-5-sodium sulfonate. 1941. In German. 1.50

7315 - 7317 PB L 70254 — "Dianilgelb S1821". 1941. In German. 1.50

7318 - 7324 PB L 70254 — Durene and intermediate, dichloromethyl - m-xylene. 1934-1939. In German. 1.50

7325 - 7332 PB L 70254 — "Dianilgelb 3 GN". 1940 - 1941. In German. 1.50

7333 - 7337 pB L 70254 — Diphenyl arsinic acid. 1935. In German. 1.50

7338 - 7344 PB L 70254 — 1,3-Dichloro-4,6-dinitrobenzene. 1936-1938. In German. 1.50

7345 - 7349 PB L 70254 — 3, 5-Dichloro-4,6-dimethyl-isatine. 1934. In German. 1.50

7350 - 7364 PB L 70254 — "Diazinechtreinblau G". 1933 - 1935. In German. 1.50

7365 - 7374 PB L 70254 — 3,6-Dichlorophthalic acid. 1938-1934. In German. 1.50

7375 - 7376 PB L 70254 — 1,2-Dichlorobenzene-4-sulfonic acid. 1936. In German. 1.50

7377 - 7379 PB L 70254 — Aluminum salt of crude wool fat acid. 1935-1938. In German. 1.50

7380 - 7381 PB L 70254 — Cement for roofing. 1935 - 1936. In German. 1.50

7382 - 7383 PB L 70254 — Duplication.

7384 PB L 70254 — 1,2-Dichlorobenzene -4-barium sulfonate. 1940. In German. 1.50

7385 - 7389 PB L 70254 — N,N-Dimethylaniline-3-sodium sulfonate. 1937. In German. 1.50

7390 - 7393 and 7396 - 7397 PB L 70254 — 1,2-Diamino-4-naphthol -7-sulfonic acid. 1937-1938. In German. 1.50

7394 - 7395 PB L 70254 — 1-Azobenzene-2-naphthylamine-4,7-disulfonic acid. 1938. In German. 1.50

7396 - 7397 PB L 70254 — See 7390 - 7393.

7398 - 7400 PB L 70254 — 2,3-Naphthalenediol. 1923. In German. 1.50

7401 - 7402 PB L 70254 — 2,2'-Di(acetamidophenyl)-disulfide. 1934. In German. 1.50

7403 - 7407 PB L 70254 — 1,2-Diamino naphthalene hydrochloride. 1937-1943. In German. 1.50

7408 - 7410 PB L 70254 — Methylester of dimethylamino acetic acid. 1938. In German. 1.50

7411 - 7413 PB L 70254 — 3,6-Diamino carbazole hydrochloride. 1938. In German. 1.50

7414 - 7423 PB L 70254 — p-Dimethylamino-benzaldehyde. 1938. In German. 1.50

7424 - 7439 PB L 70254 — "Dispergamin S" and "M". 1932-1939. In German. 2.00

7440 PB L 70254 — Handwritten memorandum concerning "Deltapapin". 1938. In German. 1.50

7441 - 7444 PB L 70254 — 3,5-Diamino benzoic acid. n.d. In German. 1.50

7445 - 7449 PB L 70254 — 1,2-Dichloronaphthalene. 1939-1941. In German. 1.50

7450 - 7454 PB L 70254 — Desoxybenzoin. 1941. In German. 1.50

7455 - 7464 PB L 70254 — Di-o-toluylperoxide. 1939-1942. In German. 1.50

7465 - 7468 PB L 70254 — "Dentalharz". 1939 -1944. In German. 1.50

7469 PB L 70254 — 2,5-Diamino-benzoic acid. 1940. In German. 1.50

7470- 7482 PB L 70254 — Chloro butanol and dithiodibutyl-eneglycol. 1940. In German. 1.50

7483 - 7484 PB L 70254 — Purification of 4,4'-dichlorobenzophenone. 1940. In German. 1.50

7485 - 7508 PB L 70254 — Leather oils. 1940-1941. In German. 2.50

7509 - 7512 PB L 70254 — Benzene sulfonic acid-N-chloro-2,4-dichloroanilide. 1941. In German. 1.50

7513 PB L 70254 — "Decklack N". 1942. In German. Handwritten note. 1.50

7514 - 7516 PB L 70254 — Dichlorotrinitrobenzene. (Notes). 1944. In German. 1.50

7517 - 7518 PB L 70254 — "Densodrin HB 1/148". 1944. In German. 1.50

7519 - 7522 PB L 70254 — Diethyl sulfate. 1940-1944. In German. 1.50

7523 - 7526 PB L 70254 — Dinitro acenaphthene. 1941-1943. In German. 1.50

7527 - 7528 PB L 70254 — N,N-diethyl chloroacetamide. 1943. In German. 1.50

7529- 7530 PB L 70254 — 3,6-Dinitro-carbazole. 1942. In German. 1.50

Miscellaneous Chemicals (contd)

7531 - 7540 FB L 70254 — Diphenylacetonitrile. 1942-1943. In German. 1.50

7541 - 7560 FB L 70254 — Dichloro dinitrocarbozole. 1941-143. In German. 2.00

7561 - 7563 FB L 70254 — List of names of compounds. n.d. In German. 1.50

7564 - 7568 FB L 70254 — "Hydrolein." 1933 - 1935. In German. 1.50

7569 - 7575 FB L 70254 — Hydroquinone monomethylether. 1935. In German. 1.50

7576 - 7585 FB L 70254 — "Helindongrün." n.d. In German. 1.50

7586 - 7590 FB L 70254 — "Helindonbraun CRD". 1934. In German. 1.50

7591 - 7595 FB L 70254 — "Helindongelb R". 1934. In German. 1.50

7596 - 7597 FB L 70254 — Wood impregnation with "Intravan". 1938. In German. 1.50

7598 - 7614 FB L 70254 — "Helindonrot 207" = "R". 1937 - 1938. In German. 2.00

FB L 70254-S. I. G. FARBENINDUSTRIE A. G. Production of organic chemicals. (FIAT Microfilm Reel A 31, Frames 6875-7614, abstract cards) 1923-1945. 171 p. Price: Microfilm-$4.00 - Photostat-$12.00
Brief abstracts, in English, of the reports in the above reel, prepared in Germany by FIAT investigators.

FB L 73585. I.G. FARBENINDUSTRIE A.G. Reports in various fields. (FIAT Microfilm Reel F 212, Frames 4801-5779). 1937-1944. 978 f. Price: Microfilm-$6.00 - Enlargement Print-$98.00
This FIAT reel covers investigations in chemical engineering synthetic rubber, analytical chemistry, plastics, etc. Individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $6.00. Please include FB and frame numbers when ordering individual items. In German.

Frames	Title	Price
4801-4813 FB L 73585	Experiences with flat-type bell bottoms (fractionating columns). Jul 20, 1944. In German.	$1.50
4814-4820 FB L 73585	Examination of a column 1000mm in diameter with flat bubble-caps made of steatit. Aug 11, 1942. In German.	1.50
4821-4834 FB L 73585	The applicability of the results of rectification experiments from a semi-technical scale to a large scale. Dec 11, 1940. In German.	1.50
4835-4852 FB L 73585	Construction and testing of a flat-type bubble-cap bottom column of 800mm in diameter. Dec 27, 1940. In German.	2.00
4853-4868 FB L 73585	The separating effect of laboratory rectifying columns, Part I. Dec 5, 1940. In German.	2.00
4869-4881 FB L 73585	The separating effect of laboratory rectifying columns, Part II. Feb 19, 1942. In German.	1.50
4882-4884 FB L 73585	Report on a meeting of technical staff members: Laboratory columns for fine-distillation, Jena, May 11 and 12, 1942. Dec 19, 1942. In German.	1.50
4885-4922 FB L 73585	The control of the loose bulk volume and the "packed volume" of powders. Jul 5, 1938. In German.	4.00
4923-4929 FB L 73585	Increasing the filling ratio of mixing drums by the application of a vacuum. Feb 23, 1939. In German.	1.50
4930-4988 FB L 73585	Experiments on the cooling of humid air on water-rinsed filling bodies. Mar 15, 1941. In German.	6.00
4989-5005 FB L 73585	Circulating-air dryers and vibration dryers. By Seel. Jul 26, 1938. In German.	2.00
5006-5009 FB L 73585	The production of potassium humate fertilizers of a high concentration. By Meinze. Nov 21, 1938. In German.	1.50
5010-5015 FB L 73585	Determination of sulfates by potentiometric titration. By Schaller. Jul 14, 1939. In German.	1.50
5016-5017 FB L 73585	Production of a solbar of higher polysulfide content. By Specht and Teichmann. Oct 25, 1939. In German.	1.50
5018-5027 FB L 73585	Hydrothermal synthesis of magnesium and magnesium-aluminum hydrosilicates (serpentine, talcum, montmorillonite-bleaching earth). By Noll. Feb 17, 1939. In German.	2.00
5028-5034 FB L 73585	Blacking out with complementary colors. Nov 15, 1939. In German.	1.50
5035-5059 FB L 73585	The state of the technique of filtration and centrifuging of dyes. Aug 19, 1938. In German.	2.50
5060-5065 FB L 73585	A cable-saving telemeter system. By Drescher. n.d. In German.	1.50
5066-5090 FB L 73585	Experiences with the electric control of a Loeffler boiler plant. n.d. In German.	2.50
5091-5098 FB L 73585	Report of activities, Dr. Eberberger, Scientific Laboratory I. (Aliphatic amino compounds). Jul to Oct 1940. In German.	1.50
5099-5111 FB L 73585	Experiments concerning the control of the alkaline Buna S batch. By Graulich. Dec 19, 1941. In German.	1.50
5112-5114 FB L 73585	Experiences with the application of the iodine chloride method for the determination of the butadiene content of Buna S and Buna SS. By Kruppe. May 16, 1941. In German.	1.50
5115-5119 FB L 73585	Buna S, (Analysis). By Krumme. Mar 25, 1938. In German.	1.50
5120-5122 FB L 73585	Supplement to the investigation of Buna S. By Kruppe. May 7, 1941. In German.	1.50
5123-5149 FB L 73585	The determination of double bonds in the butadiene polymers Buna S and N, especially the application of the determination of the double bonds for the determination of the butadiene polymer constituent in Buna S. By Kruppe. Oct 25, 1937. In German.	3.00

5150-5156 PB L 73585 — The determination of silicic acid and phosphoric acid in water, especially in boiler feed water and condensates. By Zimmermann. Feb 10, 1941. In German. 1.50

5157-5163 PB L 73585 — A rapid quantitative method for the determination of chromium, molybdenum, manganese, nickel, and copper in special steels. By Zimmermann. Jun 13, 1940. In German. 1.50

5164-5167 PB L 73585 — Rapid qualitative method for the determination of chromium, molybdenum, vanadium, manganese, nickel, and copper in special steels. By Zimmermann. Jun 13, 1940. In German. 1.50

5168-5171 PB L 73585 — Purification of hydrogen. By Spiess. May 11, 1938. In German. 1.50

5172-5186 PB L 73585 — The production of lead by the hydrometallurgical process. May 4, 1937. In German. 1.50

5187-5198 PB L 73585 — Smelting experiments in the system $CaO-MgO-SiO_2$ with small additions of Al_2O_3, Fe_2O_3, Mn_3O_4 and CaF_2. By Dietrich. Feb 25, 1939. In German. 1.50

5199-5203 PB L 73585 — The processing of cupriferous, plated metal scrap. By Ebert. May 5, 1937. In German. 1.50

5204-5208 PB L 73585 — Reduction of tertiary calcium phosphate with silicon monoxide. By Grube. Feb 2, 1939. In German. 1.50

5209-5213 PB L 73585 — Removing carbon monoxide from gases. By W. Schmidt. Jan 20, 1938. In German. 1.50

5214-5227 PB L 73585 — The processing of cupriferous molybdenite (Utah concentrate). By Marx. Jul 5, 1937. In German. 1.50

5228-5279 PB L 73585 — Heat of reaction, heat economy, and course of reaction in the chlorination to $MgCl_2$ of natural raw materials containing magnesium. By Wienert. Mar 3, 1936. In German. 5.50

5280-5296 PB L 73585 — The expanding of thick-walled water tubes into super-pressure boilers. n.d. In German. 2.00

5297-5330 PB L 73585 — The manufacture of lignite water gas for the production of hydrogen in Bitterfeld. By Fritsche. Oct 2, 1936. In German. 3.50

5331-5340 PB L 73585 — Experiments with water from the Mulde river: Softening of the water by the caustic soda/soda process and subsequent treatment with phosphoric acid. Feb 18, 1935. In German. 1.50

5341-5349 PB L 73585 — Hot desilicification of Mulde river water with magnesium oxide. n.d. In German. 1.50

5350-5368 PB L 73585 — A new method for the treatment of the boiler feed water for large noncondensing power plants. By F. Kaiseling and H. Kahlert. n.d. In German. 2.00

5369-5397 PB L 73585 — Experiences with a large cooling tower. Jul 11, 1941. In German. 3.00

5398-5418 PB L 73585 — The water content of compressed gases and its analytical determination. By Michel. Aug 1, 1941. In German. 2.50

5419-5430 PB L 73585 — An analytical apparatus for determination of the chlorine concentration in chlorine gas mixtures. n.d. In German. 1.50

5431-5442 PB L 73585 — Arrangement for clearing coal bunkers. Dec 23, 1940, Feb 26, 1941. In German. 1.50

5443-5444 PB L 73585 — Clearing arrangement for soft coal bunkers. Feb 19, 1941. In German. 1.50

5445-5460 PB L 73585 — Cleaning of the equipment of super-voltage systems while they are charged. By Roggendorf. Dec 1, 1939. In German. 2.00

5461-5478 PB L 73585 — The development of the cyclone to a heavy-duty dust separator. By Starke. n.d. In German. 2.00

5479 PB L 73585 — Irrelevant document with no technical content.

5480-5504 PB L 73585 — A new method of treating the water for boiler plants. By H. Reichelt. n.d. In German. 2.50

5505-5528 PB L 73585 — Anti-freezing liquids. Aug 6, 1941. In German. 2.50

5529-5537 PB L 73585 — Special heat exchangers, especially such made of plastics. By H. Behringer. Mar 25, 1941. In German. 1.50

5538-5543 PB L 73585 — Production methods in the processing technique. n.d. In German. 1.50

5544-5554 PB L 73585 — Laboratory still. By Weiss and Haase. Aug 23, 1939. In German. 1.50

5555-5591 PB L 73585 — Vinidur and graphite as building materials for heat exchangers. By D. Starck. Apr 25, 1944. In German. 4.00

5592-5621 PB L 73585 — Resistance of plastics to the influence of chemicals, its determination and utilization, using Igelit PCU as a model. By W. Buchmann. Aug 14, 1940. In German. 3.00

5622-5638 PB L 73585 — Calculation of the temporal and local distribution of temperature in a furnace with circulating air by means of the Laplace-transformation. n.d. In German. 2.00

5639-5677 PB L 73585 — The present state of developments in the field of distilling and rectifying technique at Bitterfeld. Apr 13, 1942. In German. 4.00

5678-5690 PB L 73585 — Distillation column type Bitterfeld. Sep 12, 1940. In German. 1.50

5691-5707 PB L 73585 — Fractures free from deformation of Cr-Ni-Mo steel screws. By W. Buchmann. n.d. In German. 2.00

5708-5731 PB L 73585 — Protective fittings for high voltage insulators. By A. Roggendorf. Jan 1941. In German. 2.50

5732-5743 PB L 73585 — Coronene. By Boente. n.d. In German. 1.50

5744-5747 PB L 73585 — Investigation of amphosoap 18. By Kerckow. Dec 9, 1938. In German. 1.50

5748-5752 PB L 73585 — Comparative analysis of hydroxy-amido- and imido groups. By Kerckow. Sep 13, 1937. In German. 1.50

5753-5757 PB L 73585 — Determination of butadiene in presence of butylene. By Kerckow and Schuhknecht. Aug 17, 1937. In German. 1.50

5758-5766 PB L 73585 — The examination of rust protection paints. By Kerckow and Winzschmitt. Sep 20, 1937. In German. 1.50

5767-5769 PB L 73585 — The determination of the reaction capacity of aluminum chloride. By Kerckow and Wurzschmitt. Aug 19, 1937. In German. 1.50

5770-5779 PB L 73585 — Quantitative determination of arsenic traces, with simultaneous separation of antimony. By Machek. Oct 24, 1939. In German. 1.50

PB L 73585-S. I.G. FARBENINDUSTRIE A.G. Reports in various fields. (FIAT Microfilm Reel F 212, Frames 4801-5779, abstract cards). 1937-1944. 83 p.
Price: Microfilm-$2.00 - Photostat-$6.00
Brief abstracts of the individual items on the above reel F 212, PB 73585, prepared by FIAT personnel in Germany.

PB L 73894. I.G. FARBENINDUSTRIE A.G. Reports on textile auxiliary agents. (FIAT Microfilm Reel M 75, Frames 4676-5295). 1935-1942. 620 f.
Price: Microfilm-$6.00 - Enlargement Print-$62.00
This FIAT microfilm reel contains monthly reports on the production and testing of detergents, wetting agents, resins, and other textile auxiliary and finishing agents. 78 individual items are listed below. They will be available as enlargement prints only; the entire reel may be purchased in microfilm form for $6.00. Please give PB and frame numbers when ordering individual items from this microfilm reel. The reports date from 1935-1942. In German.

Frames	Title	Price
4676-4677 PB L 73894	On concentration of formaldehyde. In German. Incomplete.	$1.50
4678-4685 PB L 73894	Activity reports for May-Aug 1940 concerning dyes. In German.	1.50
4686-4694 PB L 73894	On fumaric acid produced over an oxalacetic ester. In German.	1.50
4695-4702 PB L 73894	Fumaric acid and maleic acid derivatives over an oxalacetic ester. In German.	1.50
4703-4708 PB L 73894	Research on (1) fumaric acid; (2) succinic ester; and (3) hydrogenation of lignin. In German.	1.50
4709-4718 PB L 73894	Polymerization of diisocyanates. In German.	1.50
4719-4727 PB L 73894	"Desmosit D". In German.	1.50
4728-4741 PB L 73894	Nitration of cyclohexane. In German.	1.50
4742-4750 PB L 73894	Treatment of cyclohexane with nitric acid. In German.	1.50
4751-4757 PB L 73894	Phenols from "Phenoselvan" extracts. In German.	1.50
4758-4766 PB L 73894	Separation of phenol mixtures. Nicotinic acid. In German.	1.50
4767-4772 PB L 73894	Pyrocatechol derivatives. Amidation of alkylphenols. Unsaponifiable "Desmophene". In German.	1.50
4773-4780 PB L 73894	Octadecylphenylene diamines. In German. Difficult to read.	1.50
4781-4784 PB L 73894	On detergents and other textile aids. In German.	1.50
4785-4786 PB L 73894	Testing substances for possible intensification of printing properties. In German.	1.50
4787-4790 PB L 73894	Oleic acid - total protein hydrolysate and similar products. In German.	1.50
4791-4797 PB L 73894	Wetting agent for "Silfesta". In German.	1.50
4798-4799 PB L 73894	Protein decomposition products. In German.	1.50
4800-4805 PB L 73894	Condensation products of amino-carboxylic acid. In German.	1.50
4806-4814 PB L 73894	Technical product of rosin sarcoside. Substances which intensify printing properties and other products. In German.	1.50
4815-4825 PB L 73894	Coloring of acetate rayon with acid wool dyes. Substances which intensify printing properties. Wetting agents and other textile aids. In German.	1.50
4826-4834 PB L 73894	Substances which intensify printing properties. Examination of competitive plastics. In German.	1.50
4835-4845 PB L 73894	Protein hydrolysates. Testing organic plastics and inorganic chemicals. In German.	1.50
4846-4853 PB L 73894	Experiments on thiokols. In German.	2.00
4854-4908 PB L 73894	Research in the field of perdurens. In German.	4.50
4909-4911 PB L 73894	1,2-Dichloroethers and phenols. In German.	1.50
4912-4914 PB L 73894	Resins capable of being hardened. Perdurens. In German.	1.50
4915-4919 PB L 73894	Perdurens and resins with 1,2-dichloroethers. In German.	1.50
4920-4928 PB L 73094	Perdurens. Resins capable of being hardened. Salicylic resins. 1,2-Dichloroether resins. In German.	1.50
4929-4950 PB L 73894	Formaldehyde resins and other resins. Perdurens. In German.	2.50
4951-4954 PB L 73894	Synthetic resins. In German.	1.50
4955-4959 PB L 73894	Linoleum binder from butol residues. In German.	1.50
4960-4962 PB L 73894	Performing the reaction $Cl\,CH\,C\,H_2\,Cl + CH \equiv HC \rightarrow 2H_2\,C{=}C\,H\,Cl$. In German. Difficult to read.	1.50

Miscellaneous Chemicals (contd)

4963-4966 PB L 73894 — Synthetic resins. In German. 1.50

4967-4968 PB L 73894 — Experiments for the reaction of monoisocyanates with cellulose and "Serikose". In German. 1.50

4969-4971 PB L 73894 — Experiments for the production of resin-like resins. In German. 1.50

4972-4982 PB L 73894 — Work in the field of perdurens. In German. 1.50

4983-4986 PB L 73894 — Baking lacquers with diisocyanates. In German. One frame is almost illegible. 1.50

4987-4990 PB L 73894 — Linoleum binder from thiodiglycolic acid. In German. 1.50

4991-4994 PB L 73894 — Linoleum binder from thiodipropionic acid. Saponification of thiodipropionitrile. In German. 1.50

4995-4999 PB L 73894 — Production of aryl ureas. In German. 1.50

5000-5015 PB L 73894 — Resins from phenylurea. In German. 2.00

5016-5020 PB L 73894 — Reduction of organic polysulfides by means of sodium amalgam. In German. 1.50

5021-5023 PB L 73894 — Salicylic acid resins for paper sizing. In German. 1.50

5024-5029 PB L 73894 — Aliphatic and aromatic diureas and their reaction products with formaldehyde. In German. 1.50

5030-5034 PB L 73894 — Urea resins containing carboxyl and hydroxyl groups. In German. 1.50

5035-5036 PB L 73894 — Experiments for the condensation of xylene formaldehyde resin with compounds containing carboxyl groups. In German. 1.50

5037-5041 PB L 73894 — Tertiary butyl styrene. In German. 1.50

5042-5044 PB L 73894 — Supplement to the amalgam reduction of organic disulfides, especially with regard to the production of mercapto acetic acid. In German. 1.50

5045-5051 PB L 73894 — Experiments on the regeneration of vulcanized synthetic rubber. In German. 1.50

5052-5059 PB L 73894 — Decomposition of wood. In German. Frame 5053 missing due to faulty numbering. 1.50

5060-5061 PB L 73894 — Work on sugar and cellulose. In German. 1.50

5062-5067 PB L 73894 — Production of m-thiocresyl propene oxide from m-thiocresol and dichlorohydrin. Obtaining of 5-nitro-2-carbethoxy indole. Research on a substitute for tartaric acid; on sugar; and on Oppanol. In German. 1.50

5068-5076 PB L 73894 — Fumaric acid fermentation and CO_2 fermentation. In German. 1.50

5077-5084 PB L 73894 — Annual report for 1941. Various organic products. In German. 1.50

5085-5089 PB L 73894 — Annual report for 1942. Various organic products. In German. 1.50

5090-5094 PB L 73894 — Annual report for 1943. Various organic products. In German. 1.50

5095-5124 PB L 73894 — Reports on textile aids. In German. 3.00

5125-5136 PB L 73894 — Sulfonated glycerol diethers. N-alkylaniline alkylated in the nucleus. In German. 1.50

5137-5142 PB L 73894 — Studies of products based on aniline. Sulfonated oralkyls. In German. 1.50

5143-5157 PB L 73894 — Testing various textile aids, especially "Iglevet 203". In German. Frame 5144 is missing due to faulty numbering. 1.50

5158-5160 PB L 73894 — Preparation of detergents and wetting agents of a definite chemical structure. In German. 1.50

5161-5164 PB L 73894 — Hydrophobing of acetate rayon. In German. 1.50

5165-5168 PB L 73894 — Finishes resistant to washing. In German. 1.50

5169-5173 PB L 73894 — Studies in the field of impregnating for resistance to greasing. In German. 1.50

5174-5196 PB L 73894 — Sarcosides, Siccatives, Alkylated benzene derivatives, Resins based on sarcoside. In German. 2.50

5197-5204 PB L 73894 — Reaction of maleic anhydride with saturated hydrocarbons in the presence of chlorine. In German. 1.50

5205-5209 PB L 73894 — Production of synthetic surface-active substances. In German. Very difficult to read. 1.50

5210-5215 PB L 73894 — Studies in the field of resins similar to glyptal and compatible with "Cellit". In German. Difficult to read in places. 1.50

5216-5222 PB L 73894 — Experiments for the production of fatty acid nitriles. In German. Difficult to read in places. 1.50

5223-5230 PB L 73894 — Experiments for the production of disinfectants for tubercle bacilli, Siccatives and sarcosides. In German. Frame 5229 is missing due to faulty numbering. 1.50

5231-5240 PB L 73894 — Work on resins compatible with "Cellit". Experiments for the production of "Iglevet 203". Detergents. In German. 1.50

5241-5244 PB L 73894 — Experiments for the production of oiling agents for textiles. Processing of Deuben low temperature carbonization oils. In German. 1.50

5245-5263 PB L 73894 — Detergents based on trichlorobenzyl chloride. Investigation of the chemical structure of xylene formaldehyde resins. In German. 2.00

5264-5268 PB L 73894 — Addition of formaldehyde on complex compounds. Detergents based on pyrocatechol. In German. Very difficult to read. 1.50

5269-5278 PB L 73894 — Principles of an interreaction of formaldehyde and nitriles. Other chemical investigations. In German. 1.50

5279-5287 PB L 73894 — Resin from benzene and formaldehyde and cresol oil or phenol containing various amounts of ethylene oxide, levelizing, sizing, and softening agents in textile industry. In German. Difficult to read in places. 1.50

5288-5295 PB L 73894 — Studies on plasticizers and other textile aids. Baking lacquers. Standard reactions over xylene formaldehyde resins. In German. 1.50

PB L 73200. I. G. FARBENINDUSTRIE A. G. Various publications. (FIAT Microfilm Reel B 20, Frames 32486-33471) 1938-1944. 985 f. Price: Microfilm-$6.00 - Enlargement print-$98.50
This film contains reproductions of the issues October 1942 to December 1944 of the photo edition of "Patentberichte," and of the issues January 1938 to August 1938 of the "Literatur-Wochen-Übersicht," both issued internally by I. G. Farbenindustrie Wolfen. The "Patentberichte" list patent applications in the field with numbers, principal claims, dates and names of inventors. The "Literatur-Wochen-Übersicht" lists books and articles of possible interest to I. G., giving very short abstracts. In German.

PB L 73835. I.G. FARBENINDUSTRIE A.G., BITTERFELD, GERMANY. Laboratory reports. (FIAT Microfilm Reel BB 204, Frames 2596-2979) 1932-1933. 384 f. Price: Microfilm-$4.75 - Enlargement Print-$38.50
This reel was prepared by FIAT investigators in Germany. Individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $4.75. Please include PB and frame numbers when ordering individual items. In German.

Frames	Title	Price
2596-2609 PB L 73835	Production of calcium-silicon. (alloy). By Lautz. Aug 10, 1932. In German.	$1.50
2610-2620 PB L 73835	Experiments regarding the influence of additives on the graphitising of molded coals. By Neukirch. Aug 10, 1932. In German.	1.50
2621-2688 PB L 73835	Preparation of pure potassium chloride for caustic potash electrolysis from 90-99% potassium chloride. By Stockmeier. Aug 29, 1932. In German.	7.00
2689-2691 PB L 73835	Production of crystallized manganese chloride ($MnCl_2.4\,H_2O$) from manganese carbonate and hydrochloric acid. By Marx. Sep 20, 1932. In German.	1.50
2692-2700 PB L 73835	Comparative investigations of the solubility and hygroscopicity of hydrate-potash from Bitterfeld and Neustassfurt. By Neukrich. Sep 22, 1932. In German.	1.50
2701-2706 PB L 73835	Decomposition of chromium ore in the rotary furnace with internal hydrogen heating. By Gruetzner. Sep 23, 1932. In German.	1.50
2707-2720 PB L 73835	Magnesium oxide obtained from dolomite by means of extraction of calcium oxide from unslaked dolomite with calcium chloride solutions. By Wesner. Sep 30, 1934. In German.	1.50
2721-2777 PB L 73835	Smelting of magnetite in a high frequency induction furnace. By Schneider and Heuerlings. Oct 11, 1932. In German.	6.00
2778-2804 PB L 73835	Attack of caustic soda on nickal. By Michel. Oct 27, 1932. In German.	3.00
2805-2811 PB L 73835	The stability of ceramic substances in boiler feed water at a pressure of 25-30 atms. By Michel. Oct 31, 1932. In German.	1.50
2812-2816 PB L 73835	Report of tests for the preparation of dicalcium phosphate. By Stockmeier. Nov 21, 1932. In German.	1.50
2817-2853 PB L 73835	Test report on the purification of hydrogen of the chlorate process (Development of the process since Sep 1931). By Michel. Dec 9, 1932. In German.	1.50
2854-2864 PB L 73835	Removal of potassium nitrate from potash. By Marx. Dec 13, 1932. In German.	1.50
2865-2902 PB L 73835	Alkali bichromate as a protection against boiler scale and corrosion. By Michel. Feb 17, 1933. In German. Continuation of report No. 330 Nov 27, 1932.	4.00
2903-2914 PB L 73835	Precipitation of alumina low in alkali from the melt of the plant in Bitterfeld. By Marx. Feb 23, 1933. In German.	1.50
2915-2925 PB L 73835	The removal of ammonia from chrome alum solutions. By Schulze. Mar 7, 1933. In German.	9.50
2926-2946 PB L 73835	The preparation of iron-3-chloride sublimated by chlorination of scrap iron. By Gruetzner. Mar 9, 1933. In German.	2.50
2947-2979 PB L 73835	The influence of the layer thickness and material preheating on the chlorine yield in the preparation of magnesium chloride from an unformed mixture. By Michel. Mar 10, 1933. In German.	2.50

PB L 73835-S. I.G. FARBENINDUSTRIE A.G., BITTERFELD, GERMANY. Laboratory reports. (FIAT Microfilm Reel BB 204, Frames 2596-2979, abstract cards) 1932-1933. 30 p. Price: Microfilm-$1.00 - Photostat-$2.00
Brief abstracts of the individual items on the above reel BB 204, PB 73835, prepared by FIAT personnel in Germany.

PB L 70067. I.G. FARBENINDUSTRIE A.G., FRANKFURT AM MAIN, GERMANY. Reports in various fields of chemistry. (FIAT Microfilm Reel H 47, Frames 1-921). 1932 - 1944. 921 f. Price: Microfilm-$6.00 - Enlargement Print-$92.50.
This reel was prepared by FIAT investigators in Germany. 200 individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $6.00. Please include PB and frame numbers when ordering individual items. In German.

Frames	Title	Price
1 - 15 PB L 70067	Protection of plants from diseases, insects etc. By Pfaff. Apr 15, 1946. In German.	$1.50
16 - 18 PB L 70067	Direction for using the insecticide Gix for flies. By Doerrbach. May 25, 1943. In German.	1.50

19 - 33
PB L 70067
Insecticides and fungicides for plants. In German. 1.50

34 - 105
PB L 70067
Insecticides and fungicides applied in the form of gas. By Heinrich. Feb 1944. In German. 7.50

106 - 110
PB L 70067
Extraction of resorcinol by cyclohexanol. By Petri. Oct 16, 1939. In German. 1.50

111 - 112
PB L 70067
Experiments on the reaction of alpha-chlorocamphor with ammonia water. By Petri. Oct 17, 1939. In German. 1.50

113 - 117
PB L 70067
Sulfiting of dinitrobenzene 80/81°. By Eckelmann. Jan 30, 1940. In German. 1.50

118 - 124
PB L 70067
Some experiments for producing beta-resorcylic acid, (2,4-dihydroxy-benzoic acid). By Petri. Jan 30, 1941. In German. 1.50

125 - 129
PB L 70067
Extraction of 80% hydrochloric acid gas from Z-acid, (Z-acid - 30% chlorination acid). By Petri. Jun 13, 1940. In German. 1.50

130 - 136
PB L 70067
Experiments on melting p-phenolsulfonic acid with sodium hydroxide flakes. By Metzl. Oct 17, 1940. In German. 1.50

137 - 138
PB L 70067
A new method of producing methyl bromide. By Petri. Apr 11, 1939. In German. 1.50

139 - 140
PB L 70067
Catalysis of the chlorination of methane and methyl chloride by oxygen. By Petri. Jul 22, 1943. In German. 1.50

141 - 142
PB L 70067
Provisional instruction for producing benzylnaphthalene. By Thomsen. Jul 8, 1931. In German. 1.50

143 - 152
PB L 70067
Reactions of trichloroacetonitrile. By Dachlauer. Apr 12, 1938. In German. 1.50

153 - 171
PB L 70067
Instructions for industrial chlorination of acetonitrile to trichloroacetonitrile. By Dachlauer. Nov 2, 1939. In German. 2.00

172 - 175
PB L 70067
Saponification of trichlorethylene. By Petri. Apr 2, 1943. In German. 1.50

176 - 177
PB L 70067
By-products of the production of chloroacetic acid from trichlorethylene and sulfuric acid. By Haller. Oct 3, 1942. In German. 1.50

178 - 179
PB L 70067
Reaction of trichlorethylene vapors with sulfuric acid and water to form chloroacetic acid in a trickling column. By Petri. Jul 23, 1942. In German. 1.50

180 - 182
PB L 70067
Experiments on the utilization of waste sulfuric acid of the benzene sulfochloride plant for the production of chloroacetic acid. By Petri. Feb 11, 1942. In German. 1.50

183 - 186
PB L 70067
Calculation of the heat effect for production of chloroacetic acid from trichloroethylene. By Seidel. Nov 19, 1940. In German. 1.50

187 - 195
PB L 70067
Production of trichloroacetonitrile. By Dachlauer. Apr 25, 1942. In German. 1.50

196 - 201
PB L 70067
Preparation of acetonitrile by extracting an aqueous solution with the aid of methylene chloride. By Dachlauer. Jan 26, 1942. In German. 1.50

202 - 208
PB L 70067
Beta-resorcylic acid, (2,4-dihydroxybenzoic acid). By Petri. Oct 30, 1941. In German. 1.50

209 - 214
PB L 70067
Extraction of resorcinol by means of cyclohexanol. By Petri. Oct 16, 1939. In German. 1.50

215 - 216
PB L 70067
Experiments on processing pyrocatechol. By Petri. Oct 11, 1939. In German. 1.50

217
PB L 70067
Nitroxyl chloride and ethylene. By Petri. May 27, 1942. In German. 1.50

218
PB L 70067
Regeneration of waste sulfuric acid. By Petri. Sep 25, 1943. In German. 1.50

219 - 222
PB L 70067
Saponification of trichlorethylene. By Petri. Apr 2, 1943. In German. 1.50

223 - 224
PB L 70067
Sodium salt from melted chloroacetic acid. By Hilkan. Nov 9, 1942. In German. 1.50

225
PB L 70067
Maleic acid. By Kraenzlein. Apr 1, 1942. In German. 1.50

226, 228
PB L 70067
Reaction of ethylene trichloride vapors with sulfuric acid, yielding chloroacetic acid and water (50:46:4) in a trickling column. By Petri. Jul 23, 1942. In German. 1.50

227
PB L 70067
ELEKTROCHEMISCHE WERKE G.M.B.H., BERLIN. Method of producing formic acid esters. Ger. patent application E 21984 - Kl 12o, dated Nov 18, 1916. Inventors: Bosshard and Strauss. In German. 1.50

229
PB L 70067
BYK-GULDENWERKE CHEMISCHE FABRIK A.G., PIESTERITZ/ELBE, GERMANY. Method for treating tars, especially green wood tars. Ger. patent application M 64,096 Kl 12 r, dated Oct 4, 1918. In German. 1.50

230
PB L 70067
Notes on chloroacetic acid. In German. 1.50

231 - 233
PB L 70067
Experiments for the utilization of benzene sulfochloride waste acids. In German. 1.50

234 - 235
PB L 70067
Notes on chloroacetic acid. In German. 1.50

236 - 237
PB L 70067
Chloroacetic acid from trichlorethylene. By Dickhaeuser. Jan 15, 1941. In German. 1.50

238
PB L 70067
Reaction of 4-chloro-3-nitrotoluene with aqueous ammonia. By Petri. Feb 10, 1940. In German. 1.50

239
PB L 70067
Notes on nitro-p-toluidine. In German. 1.50

240 - 241
PB L 70067
Reaction of 4-chloro-3-nitrotoluene with aqueous ammonia. By Petri. Jul 27, 1939. In German. 1.50

242 - 243
PB L 70067
Release of ammonia in the nitroaniline apparatus. By Petri.
May 13, 1949. In German. 1.50

244 - 249
PB L 70067
Some experiments on the "matter insoluble in acetone" present in paranitroaniline. By Petri.
Dec 28, 1937. In German. 1.50

250 - 251
PB L 70067
Determination of p-chloronitrobenzene present in p-nitroaniline, and of p-dichloronitrobenzene present in p-chloro-o-nitroaniline.
By Petri. Jun 15, 1938.
In German. 1.50

252
PB L 70067
Notes on p-nitro-aniline.
In German. 1.50

253 - 255
PB L 70067
Some further experiments on the reaction of p-chloronitrobenzene with ammonia of different concentration. By Petri. Sep 11, 1936.
In German. 1.50

256 - 258
PB L 70067
Continuous production of nitroanilines in the flow tube.
By Podschus. Jul 6, 1937.
In German. 1.50

259 - 263
PB L 70067
Experiments on sulfur therapy.
By Schnitzer. Apr 20, 1938.
In German. 1.50

264 - 274
PB L 70067
The possibility of producing pantocaine solutions free from separations. By Eisenbrand.
Nov 3, 1937. In German. 1.50

275 - 277
PB L 70067
Pantocaine dry substance for lumbar anaesthesia. By Schaumann.
Apr 12, 1937. In German. 1.50

278 - 280
PB L 70067
"Allegan" for salt-lick stones.
By Middendorf. Apr 7, 1940.
In German. 1.50

281
PB L 70067
Mange of goats in Austria.
By Wagner and Hetzel.
Mar 28, 1940. In German. 1.50

282 - 284
PB L 70067
Mange on chamois in Austria.
By Wagner. Feb 8, 1940.
In German. 1.50

285 - 287
PB L 70067
Therapeutic handwashing agent.
Oct 29, 1943. In German. 1.50

288 - 289
PB L 70067
Purgative effect of Praecutan and similar products. By Schaumann.
Jan 16, 1942. In German. 1.50

290 - 292
PB L 70067
Zephirol.
Mar 23, 1938. In German. 1.50

293 - 294
PB L 70067
Granulated "Desazon".
In German. 1.50

295- 299
PB L 70067
Disinfectant KZ.
In German. 1.50

300
PB L 70067
Disinfectants.
By Schnitzer. Mar 6, 1935.
In German. 1.50

301 - 303
PB L 70067
Ascorbic acid.
By Beil. Jul 20, 1942.
In German. 1.50

304 - 316
PB L 70067
Paragen. By Schnitzer.
Apr 4, 1938. In German. 1.50

317 - 322
PB L 70067
Neomin.
In German. 1.50

323 - 334
PB L 70067
Inpneumol.
In German. 1.50

335 - 336
PB L 70067
Disinfectant action of chlorocresol, in presence of sepasine-sulfoamino acetic acid preparations.
Apr 5, 1943. In German. 1.50

337- 340
PB L 70067
Substitutes for phenol and soap, for lysol and antisarnico.
By Middendorf. Mar 27, 1943.
In German. 1.50

341
PB L 70067
Benzyl-6-methoxy-3-methyl ephedrine and its hydrochloride. (Racemate).
In German. 1.50

342
PB L 70067
A benzylephedrine derivative (Preparation 5103). By Schaumann.
Jun 13, 1935. In German. 1.50

343 - 347
PB L 70067
Suprifen.
By Schaumann. Nov 15, 1941.
In German. 1.50

348 - 350
PB L 70067
Tapeworm agent W 376.
By Schaumann. n.d.
In German. 1.50

351 - 353
PB L 70067
Congasin.
By Fussgaenger.
Aug 8, 1939. In German. 1.50

354 - 356
PB L 70067
Surfen C.
By Eisenbrand. Jul 27, 1938.
In German. 1.50

357 - 358
PB L 70067
Thiourea.
By Eisenbrand. Jul 20, 1938.
In German. 1.50

359 - 368
PB L 70067
Surfen C.
By Schnitzer. May 29, 1937.
In German. 1.50

369
PB L 70067
Congasin.
By Jensch. Feb 8, 1940.
In German. 1.50

370 - 373
PB L 70067
Surfen C.
Mar 15, 1939. In German. 1.50

374 - 382
PB L 70067
Sodium 2-ethylmercurimercapto-benzoxazole-5-carboxylate.
Mercury preparation Hoechst 6427.
In German. 1.50

383 - 384
PB L 70067
Glyoxylic ethylester alcoholate.
By Siebel. Mar 10, 1937.
In German. 1.50

385 - 386
PB L 70067
Beta-l-xylose.
Apr 26, 1937. In German. 1.50

387 - 389
PB L 70067
Tetra acetyl-l-xylonic nitrile.
By Siebel. n.d. In German. 1.50

390
PB L 70067
Beta-l-xylose.
Nov 3, 1936. In German. 1.50

391 - 398
PB L 70067
Ascorbic acid.
By Hartmann. Oct 20, 1936.
In German. 1.50

399
PB L 70067
Glyoxylic ethylester alcoholate.
Sep 30, 1936. In German. 1.50

400 - 401
PB L 70067
Tetraacetyl-l-xylonic nitrile.
Sep 30, 1936. In German. 1.50

402 - 403
PB L 70067
Beta-l-xylose.
By Siebel. Sep 17, 1936.
In German. 1.50

404 - 405
PB L 70067
Monobenzalsorbitol.
By Siebel. Sep 7, 1936.
In German. 1.50

406 - 407
PB L 70067
Lead tetra-acetate.
By Siebel. Sep 7, 1936.
In German. 1.50

408 - 409 PB L 70067 — Purifying crude ascorbic acid. Aug 11, 1936. In German. 1.50

410 - 424 PB L 70067 — Ds 162 disinfectant. By Schnitzer. Dec 14, 1935. In German. 1.50

425 - 426 PB L 70067 — Spasmolytical treatment of war nephritis. In German. 1.50

427 PB L 70067 — Gekoman. By Schmidt. Sep 2, 1942. In German. 1.50

428-429 PB L 70067 — Wound shock. By Schaumann. Jul 3, 1942. In German. 1.50

430 - 435 PB L 70067 — Suprarenal preparation 605. By Schaumann. In German. 1.50

436 - 439 PB L 70067 — Wofatites. Jul 31, 1941. In German. 1.50

440 - 446 PB L 70067 — Wofatite. By Luecker. Jun 13, 1941. In German. 1.50

447 PB L 70067 — Frixal emulsions. By Von Middendorf. Oct 4, 1937. In German. 1.50

448 PB L 70067 — Preparations acting on the bile. By Bockmuehl. Oct 30, 1941. In German. 1.50

449 - 452 PB L 70067 — Discussion on Cholaflavin. Jan 30, 1935. In German. 1.50

453 - 454 PB L 70067 — d-phenylpropanol cinnamyl methyl amine hydrochloride. By Ruppert and Eisenbrand. Aug 9, 1935. In German. 1.50

455 PB L 70067 — 4-(beta-diethylamino-acetoxy)-chaulmoogranillide hydrochloride. By Bockmuehl. Jun 27, 1932. In German. 1.50

456 PB L 70067 — Preparation 4887 4-(beta-diethylamino-ethoxy-)chaulmoogranillide hydrochloride. By Doerzbach. n.d. In German. 1.50

457 PB L 70067 — Preparation 4887=4-(beta-diethyl amino-ethoxy)-chaulmoogranillide hydrochloride. By Schnitzer. n.d. In German. 1.50

458 PB L 70067 — Thyreotropin ill. In German. 1.50

459 - 471 PB L 70067 — Thyreodal. In German. 1.50

472 - 473 PB L 70067 — Cesarol powder mixed with Tamol. By Pfaff. Nov 11, 1944. In German. 1.50

474 - 479 PB L 70067 — The insecticidal action of Fluorocesarol compared with that of Cesarol. By Finkenbrink. Mar 7, 1944. In German. 1.50

480 PB L 70067 — Reports referring to various compounds. By Greune. Apr 18, 1946. In German. 1.50

481 - 537 PB L 70067 — Experimental tests with pharmaceutical preparations. By Fussgaenger. Apr - Jun 1946. In German. 6.00

538 PB L 70067 — Liver extract A and B. By A. Mager. n.d. In German. 1.50

539 - 5 44 PB L 70067 — Vaccine experiments. By Schnitzer. Sep 5, 1936. In German. 1.50

545 - 561 PB L 70067 — Yeast produced from sulfite waste liquor suitable for human nutrition. By Butschek. Mar 1944. In German. 1.50

562 - 564 PB L 70067 — The torula utilis yeast substance compared with beer yeast. By Vetter. Nov 29, 1941. In German. 1.50

565 - 571 PB L 70067 — Ointments. By Middendorf. May 28, 1941. In German. 1.50

572 - 576 PB L 70067 — Uterinum 6090. In German. 1.50

577 - 579 PB L 70067 — Varon 3,5-dimethoxyphenylmethylaminoethanol hydrochloride. By Eisenbrand. Jul 17, 1944. In German. 1.50

580 PB L 70067 — Uterinum 6090, (3,5-dimethoxy-phenyl-methylamino-ethanol). In German. 1.50

581 - 582 PB L 70067 — Varon substitutes. By Bockmuehl. Nov 11, 1943. In German. 1.50

583 -584 PB L 70067 — Arsenic preparation Hoechst 2636. In German. 1.50

585 - 587 PB L 70067 — Arsenic preparation Hoechst 4004. In German. 1.50

588 - 596 PB L 70067 — Arsonic acid Hoechst 4002. In German. 1.50

597 - 600 PB L 70067 — 3,4-benzo-(4-methyl)-imidazolone-1-arsonic acid. Preparation Hoechst 2754. In German. 1.50

601 - 602 PB L 70067 — Arsenic preparation Hoechst 3767 for the peroral therapy of amoebic dysentery. In German. 1.50

603 - 620 PB L 70067 — Depot-Insulin "Bayer". By Schaumann and Duerzbach. 1938 / 1941. In German. 2.00

621 PB L 70067 — Darrophen relatorio. In German. 1.50

622 - 624 PB L 70067 — Combating the gadfly. By Wagner. Jul 22, 1937. In German. 1.50

625 - 262 PB L 70067 — Pyrethrin and rotenone. By Bockmuehl. Jul 22, 1937. In German. 1.50

627 - 628 PB L 70067 — Relatorio for Novalgin-quinine dragees. In German. 1.50

629 PB L 70067 — Preparation 1857. By Schaumann. Nov 18, 1941. In German. 1.50

630 PB L 70067 — Pyramidon substitutes. By Bockmuehl. Oct 5, 1940. In German. 1.50

631 - 633 PB L 70067 — 12P-(Marfanil-Frontalbin)-powder. By Bumiller. May 19, 1943. In German. 1.50

634 - 635 PB L 70067 — Surfen. By Fussgaenger. Jul 25, 1941. In German. 1.50

636 - 641 PB L 70067 — Surfen in oily solution. By Bumiller. Nov 4, 1940. In German. 1.50

642 - 646 PB L 70067 — Surfen A. In German. 1.50

647 - 653 PB L 70067 — Surfen. May 31, 1938. In German. 1.50

654 - 661 PB L 70067 — Surfen for treating foot and mouth disease. By Stephan and Schnitzer. Dec 1947. In German. 1.50

662 - 665 PB L 70067 — Surfen A for treating leprosy. By Schnitzer. Jul 27, 1937. In German. 1.50

666 - 668 PB L 70067 — Dihydroxyacetone. By Gorr. Nov 19, 1936. In German. 1.50

669 - 671 PB L 70067 — Dihydroxyacetone as a remedy for psychical diseases. By Fischler. Apr 6, 1939. In German. 1.50

672 - 678 PB L 70067 — Phenothiazine. By Middendorf and Ehrhard. May 1943. In German. 1.50

679 - 681 PB L 70067 — Phenothiazine. By Eisenbrand. Sep 7, 1942. In German. 1.50

682 PB L 70067 — Phenothiazine as an anthelmintic for pigs. By Bockmuehl, and Weber. Feb 27, 1942. In German. 1.50

683 PB L 70067 — Capronid. In German. 1.50

684 - 687 PB L 70067 — Substances preventing clotting of blood. By Schaumann. Jan 20, 1944. In German. 1.50

688 - 701 PB L 70067 — Rutenol. In German. 2.50

702 - 703 PB L 70067 — Glutaminate of preparation 3582. By Fussgaenger. Jan 24, 1944. In German. 1.50

704 - 707 PB L 70067 — Efficiency of nitroacridine preparation 3582 on true typhus. 9-(gamma-diethylamino-beta-hydroxypropylamino-2,7-dimethoxy-6-nitro acridine dihydrochloride. By Fussgaenger. Oct 20, 1943. In German. 1.50

708 - 709 PB L 70067 — Methylene blue as a typhus remedy. By Fussgaenger. Jan 28, 1943. In German. 1.50

710 - 712 PB L 70067 — Preparation 3582. Jan 18, 1943. In German. 1.50

713 - 716 PB L 70067 — Results of typhus experiments. By Fussgaenger. Jan 16, 1943. In German. 1.50

717 - 727 PB L 70067 — Combating body-lice. By Wagner. Jan 7, 1945. In German. 1.50

728 - 729 PB L 70067 — Bridal as an anesthetic. By Schaumann. Jan 15, 1945. In German. 1.50

730 - 731 PB L 70067 — Bridal and Dekonan. Feb 9, 1945. In German. 1.50

732 PB L 70067 — Relatorio for Aspasan solutions for inhalation. By Eisenbrand. Sep 26, 1941. In German. 1.50

733 PB L 70067 — Preparation 10,116=alpha, alpha-diphenyl-gamma-piperidino-propane hydrochloride. By Bartholomaeus. Aug 26, 1941. In German. 1.50

734 - 736 PB L 70067 — Aspasan asthma remedy. Eisenbrand. Jun 12, 1941. In German. 1.50

737 PB L 70067 — Asthma remedy 116 b. By Middendorf. May 9, 1941. In German. 1.50

738 -740 PB L 70067 — Asthma remedies. By Schaumann. May 17, 1940. In German. 1.50

741 - 744 PB L 70067 — Antiasthmatic preparations. In German. 1.50

745 - 752 PB L 70067 — Asthma therapeutics. By Schaumann. Jan 9, 1942. In German. 1.50

753 - 756 PB L 70067 — Deuterium. Apr 1939. In German. 1.50

757 - 760 PB L 70067 — Stryphnon. Feb 20, 1942. In German. 1.50

761 - 763 PB L 70067 — Anthelmintic W 807. By Middendorf. Jan 4, 1939. In German. 1.50

764 - 769 PB L 70067 — Lubisan (W 807). By Mertens and Koenig. Dec 15, 1942. In German. 1.50

770 - 771 PB L 70067 — Lubisan experiments on dogs infected with ancylostoma. By O. Wagner. Apr 17, 1940. In German. 1.50

772 PB L 70067 — Lubisan as a coccidiosis remedy. By Wagner. Mar 8, 1940. In German. 1.50

773 - 774 PB L 70067 — Lubisan resorption. By Eisenbrand. Feb 14, 1940. In German. 1.50

775 - 777 PB L 70067 — Lubisan. Dog experiments with trichocephalus infection. By Wagner. Apr 17, 1939. In German. 1.50

778 PB L 70067 — Lubisan. By v. Rusppert. Mar 30, 1939. In German. 1.50

779 - 783 PB L 70067 — Acapnon. In German. 1.50

784 - 790 PB L 70067 — Igetol. In German. 1.50

791 - 792 PB L 70067 — Production of the sodium salt N-butane-1,2,3,4,-tetracarboxylic acid monocholesterol ester. By Oeppinger. Jul 20, 1939. In German. 1.50

793 PB L 70067 — A new method for extracting lecithin from dried eggs. By Mager. Apr 10, 1940. In German. 1.50

794 - 795 PB L 70067 — Technique of chemotherapeutical experiments. By Fussgaenger. Sep 7, 1945. In German. 1.50

796 - 800 PB L 70067 — Jaundice. By Kathe and Fussgaenger. In German. 1.50

801 - 804 PB L 70067 — Fluorescence utilized in biological research. By Fussgaenger. May 23, 1942. In German. 1.50

805 PB L 70067 — Benzoic acid derivatives. By Fussgaenger. Feb 26, 1942. In German. 1.50

806 - 813 PB L 70067 — Chemotherapeutic preparations. By Fussgaenger. Mar 3, 1941. In German. 1.50

814 PB L 70067 — Sulfapyridine. By Fussgaenger. Feb 28, 1941. In German. 1.50

Miscellaneous Chemicals (contd)

815 PB L 70067 — Preparations for treating sleeping sickness. By Fussgaenger. Feb 7, 1941. In German. 1.50

816 - 817 PB L 70067 — The spreading factor of anaerobic bacteria. By Fussgaenger. Jan 15, 1946. In German. 1.50

818 PB L 70067 — Molding of cigarette tobacco. By Fussgaenger. Jan 2, 1941. In German. 1.50

819 - 820 PB L 70067 — Symptoms of incompatibility in combined sulfonamide and Mosal-varsan treatments. By Fussgaenger. Dec 20, 1940. In German. 1.50

821 - 822 PB L 70067 — Nitroarginine 9962 and nitroisatin arsonic acid 9763. By Fussgaenger. Oct 25, 1940. In German. 1.50

823 PB L 70067 — Leprosy research in Siam. By Fussgaenger. Apr 9, 1940. In German. 1.50

824 - 825 PB L 70067 — Acridine preparations. By Hetzel. Mar 1, 1939. In German. 1.50

826 - 829 PB L 70067 — Research work in the quinine series. May 12, 1939. In German. 1.50

830 - 834 PB L 70067 — Manufacture of lactones of the sterol series. By Eishold. Jul 15, 1931. In German. 1.50

835 PB L 70067 — Hygienic examination of pasture-grounds for determining causes of the tick plague in the Hessian bog areas. By Wagner. Feb 3, 1943. In German. 1.50

836 - 845 PB L 70067 — Short report on a research trip to Bulgaria. By Wagner. Aug 12, 1942. In German. 1.50

846 PB L 70067 — Cover glass culture methods for Amoeba. By Missler. Jul 21, 1941. In German. 1.50

847 PB L 70067 — Mange of chamois. By Wagner. May 17, 1939. In German. 1.50

848 - 853 PB L 70067 — Ways of spreading, sources of infection and possibilities of combating the most important diseases of domestic animals due to parasites. By O. Wagner. Apr 12, 1939. In German. 1.50

854 PB L 70067 — Combating gadfly maggots. Treating cattle suffering from fasciola hepatica with Lgetol. By Luehrs and Wagner. Apr 12, 1939. In German. 1.50

855 - 860 PB L 70067 — Enzootic death of pigeons caused by ascaridia columbae. By O. Wagner. n.d. In German. 1.50

861 - 862 PB L 70067 — Hemolysis by trade solutions of pharmaceutical preparations. By Rigler. Dec 6, 1939. In German. 1.50

863 PB L 70067 — Experiments on increasing milk secretion of goats by means of hormone preparations. By Schaumann. Feb 28, 1940. In German. 1.50

864 - 868 PB L 70067 — Combating sea-sickness. By Schaumann. n.d. In German. 1.50

869 - 871 PB L 70067 — Cancer research. By Wegmann and Fussgaenger. n.d. In German. 1.50

872 - 877 PB L 70067 — Therapeutic preparations. By Vetter. Mar 1, 1943. In German. 1.50

878 - 880 PB L 70067 — Instructions for treating paradentosis with preparation Hoechst 10566 a. Feb 19, 1944. In German. 1.50

881 - 921 PB L 70067 — Lipase preparations. By Kraut and Fussgaenger. 1939. In German. 4.50

PB L 70067-S. I.G. FARBENINDUSTRIE A.G., FRANKFURT AM MAIN, GERMANY. Reports in various fields of chemistry. (FIAT Microfilm Reel H 47, Frames 1-921, abstract cards). 1932 - 1944. 203 p. Price: Microfilm-$5.00-Photostat-$14.00.
Brief abstracts of the individual items on the above reel H-47, PB 70067, prepared by FIAT personnel in Germany.

PB L 70356. I.G. FARBENINDUSTRIE, A. G. FRANKFURT AM MAIN, GERMANY. Various chemical reports. (FIAT Microfilm Reel C-34, Frames 1-962). 1931-1944. 962f. Price: Microfilm -$6.00 - Enlargement prints $96.50.
This reel was prepared by FIAT investigators in Germany. 83 individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $6.00. Please include PB and frame numbers when ordering individual items. In German.

Frames	Title	Price
1-97 PB L 70356	Sodium chloride electrolysis. By Hass. 1939-1943. In German.	$10.00
98-100 PB L 70356	Sodium chloride electrolysis. Influence of brine containing Mg and Ca on the H_2 content of chlorine. By Hass. 1936. In German.	1.50
101-107 PB L 70356	Sodium chloride electrolysis. Hydrochloric acid - and bisulfite addition of various amounts. By Hass. 1936. In German.	1.50
108-110 PB L 70356	Sodium chloride electrolysis. Influence of SO_4 content of brine on the hydrogen and carbonic acid content of chlorine. By Hass. 1936. In German.	1.50
111 PB L 70356	Sodium chloride electrolysis, purification of hydrogen. By Hass. 1936. In German.	1.50
112-114 PB L 70356	Sodium chloride electrolysis. The influence of the brine temperature. n.d. In German. (Illegible)	1.50
115-181 PB L 70356	Sodium chloride electrolysis. By Hass. 1936. In German.	7.00
182-184 PB L 70356	Solubility of NaOH in water. By Hass. 1936. In German.	1.50
185-187 PB L 70356	Sodium chloride electrolysis, influence of the brine flow-velocity on the voltage at the cell and on the hydrogen content of chlorine. By Hass. 1936. In German.	1.50
188-190 PB L 70356	Sodium chloride electrolysis; the chlorate content of the brine. By Hass. 1936. In German.	1.50
191-196 PB L 70356	Sodium chloride electrolysis, voltage losses and heat changes in circular and longitudinal. By Hass. 1936. In German.	1.50
197-200 PB L 70356	The alkalinity of the brine during the alkali chloride electrolysis. By Hass. 1937. In German.	1.50

201-203 PB L 70356 — Sodium chloride electrolysis, experiments relating to the effect of plumbiferous brine on the reactions in the amalgam-cell. By Hass. 1931. In German. 1.50

204-211 PB L 70356 — Sodium chloride electrolysis, the voltage, the hydrogen content, the temperature and the decomposition after switching on the amalgam cell in the circuit. By Hass. 1937. In German. 1.50

212-224 PB L 70356 — Sodium chloride electrolysis, experiments concerning the dechlorination of the anolyte by means of A-carbon. By Hass. 1937. In German. 1.50
Largely illegible.

225-228 PB L 70356 — Sodium chloride electrolysis, liquor and amalgam concentration in grooves. By Hass. 1937. In German. 1.50
Mostly illegible.

229-237 PB L 70356 — Sodium chloride electrolysis, decomposition of amalgam in towers and grooves. By Hass. 1937. In German. 1.50
Completely illegible.

238-242 PB L 70356 — Operation experiences and cost of the sodium sulfide production according to the amalgam process. By Hass. 1944. In German. 1.50
Difficultly legible.

243-250 PB L 70356 — Production of amino sulfonic acid salts from potassium pyrosulfate and ammonia. By H. Meyer. 1936. In German. 1.50

251-253 PB L 70356 — The explosive tendency of aluminum methyl chloride mixed with impurities and organic solvents. 1936. In German. 1.50

254-262 PB 70356 — Production of amino sulfonic acid potassium by means of hydrolysis of imino sulfonic ammonium. By Friedel. 1936. In German. 1.50

263-273 PB L 70356 — Fluorine compounds. 1936. In German. 1.50

274-277 PB L 70356 — The production of potassium amino sulfonate from chamber product, residuary acid and lime. 1936. In German. 1.50

278-283 PB L 70356 — Methylammonium explosives. 1936. In German. 1.50

284-288 PB L 70356 — Denitration of residuary acetic acid. 1936. In German. 1.50

289-292 PB L 70356 — Production possibilities for potassium pyrosulfate of high purity. By Ketzer. 1937. In German. 1.50

293-295 PB L 70356 — Production of amino sulfonic acid potassium (K-Salt). By Voigt, Osswald. 1937. In German. 1.50

296-299 PB L 70356 — Production of potassium pyrosulfate. By H. Meyer. 1937. In German. 1.50

297 — Missing

300-301 PB L 70356 — Production of ethylene oxide. By Staib. 1937. In German. 1.50

302-305 PB L 70356 — Production of ethylene chlorohydrine. By Staib. 1936. In German. 1.50

306-317 PB L 70356 — Production and properties of potassium pyrosulfate. By H. Meyer. 1937. In German. 1.50

318-323 PB L 70356 — Production of 100% sulfurtrioxide. By Ketzer. 1937. In German. 1.50

324-333 PB L 70356 — Experiments to absorb SO_3 in 100% HNO_3. By Voigt. 1938. In German. 1.50

334-339 PB L 70356 — Calcium nitrate production. By Steinhauser. 1938. In German. 1.50

340-357 PB L 70356 — Separation of ammonium sulfate from the hydrolysis liquor of the chamber process during the production of amino sulfonic acid. 1936. In German. 2.00

358-372 PB L 70356 — The production of concentrated soda solution by decomposition of amalgam. By Körner. 1938. In German. 1.50

363 PB L 70356 — Missing

373-393 PB L 70356 — Examinations concerning calcium nitrate. By Voigt. 1938. In German. 2.50

394-448 PB L 70356 — Chemical-geological examinations of alumina. 1937. In German. 5.50

449-484 PB L 70356 — A chemical screen process on the basis of silicontetrachloride-ammonia water. By Wagner. 1938. In German. 4.00

485-491 PB L 70356 — Experimental operation for producing carbonyldiurea. By Wagner and Schmidt. 1938. In German. 1.50

492-511 PB L 70356 — High concentration of nitric acid by introduction of diluted nitric acid in form of steam into the high concentrating column. By Saenger. 1938. In German. 2.00

512-520 PB L 70356 — Experiments for producing nitrilo sulfonic acid salts and examination for suitability as water softeners. By Voigt. 1938. In German. 1.50

521-530 PB L 70356 — Examining the amount of 100% SO_3 produced from contact gas. By Hass. 1938. In German. 1.50

531-541 PB L 70356 — Process for transforming chlorine dioxide into a solid form. 1938. In German. 1.50

542-549 PB L 70356 — New method for pre-concentration of nitric acid. By Riedelsberger. 1938. In German. 1.50

550-595 PB L 70356 — The denitration of waste mixed acid. By Saenger. 1938. In German. 5.00

596-603 PB L 70356 — The continuous evaporation during the calcium nitrate operation. By Steinhaeuser and Riedelsberger. 1938. In German. 1.50

604-606 PB L 70356 — New sack filling apparatus for calcium nitrate. By Steinhäuser. 1938. In German. 1.50

607-625 PB L 70356 — Explosion of a denitration vessel. By Saenger and Oswald. n.d. In German. 2.00

626-629 PB L 70356 — The use of waste lime in the calcium nitrate production. By Beyer. 1938. In German. 1.50

630-642 PB L 70356 — Ferrites of lead and of alkaline earth as anti rustpigments. By Korinth. 1938. In German. 1.50

643-644 PB L 70356 — Electrolytic production of hydroxylamino hydrochloride. By Osswald. 1938. In German. 1.50

645-647 PB L 70356 — Preparation of sulfamide from NH_3 and SO_3. By Osswald. 1938. In German. 1.50

648-655 PB L 70356 — Utilization of acid steam. By Saenger. 1938. In German. 1.50

656-662 PB L 70356 — Preparation of hydrochloric acid from illuminating gas, chlorine and steam. By Wagner. 1938. In German. 1.50

663-679 PB L 70356 — Production of amino sulfonic acid from their salts by means of nitric acid. By Saenger. 1938. In German. 1.50

680-690 PB L 70356 — The alkaline decomposition of clay. 1939. In German. 1.50

691-698 PB L 70356 — Condensed hydrogen chloride. By Schwabe. 1938. In German. 1.50

699-711 PB L 70356 — The dissociation of concentrated nitric acid. By Weissbach. 1938. In German. 1.50

712-717 PB L 70356 — Highly concentrated nitric acid and sulfuric acid regeneration. By Oswald. 1938. In German. 1.50

718-721 PB L 70356 — Automatic filling and weighing of fertilizer. 1938. In German. 1.50

722-728 PB L 70356 — Production of hydrochloric acid from illuminating gas. By Schnell. 1938. In German. 1.50

729-737 PB L 70356 — Denitration of waste mixed acid. By Saenger. 1938. In German. 1.50

738-742 PB L 70356 — Measuring the silicic acid content of saturated steam condensates. 1938. In German. 1.50

743-760 PB L 70356 — Preparation of phenol from aniline by means of the diazo compound. By Hilpert and Hotz. 1938. In German. 2.00

761-778 PB L 70356 — Project for an extendable lead cyanamide production of 200 tons/month. By Korinth. 1937. In German. 2.00

779-792 PB L 70356 — Extraction of ferric oxide pigments from siderite. By Korinth. 1938. In German. 1.50

793-799 PB L 70356 — Ore dressing experiments in a viscous phase. By Banthien. 1938. In German. 1.50

800-806 PB L 70356 — Nitration process for cheapening of nitrobenzene. By Hilpert and Hotz. 1938. In German. 1.50

807-815 PB L 70356 — Influence of temperature and acid concentration on the absorption of contact gases in concentrated sulfuric acid. 1938. In German. 1.50

816-821 PB L 70356 — The performance of oleum absorbers. By Hass. 1938. In German. 1.50

822-845 PB L 70356 — The absorption of SO_3 in highly concentrated HNO_3. By Beyer. 1938. In German. 2.50

846-852 PB L 70356 — Experiments for the concentration of sulfuric acid with plunge burners. By Voigt. 1938. In German. 1.50

853-867 PB L 70356 — The regenation of sulfuric acid. By Staib. 1937. In German. 1.50

868-871 PB L 70356 — The degasification of feed water for 120 atms vessel at Höchst. By Geisler. 1938. In German. 1.50

872-875 PB L 70356 — The determination of the permeability of diaphragms. By Ing. Bittgenbach. 1936. In German. 1.50

876-883 PB L 70356 — High concentration nitric acid. By Forsthoff. 1936. In German. 1.50

884-890 PB L 70356 — Reversible metallic oxide gels and basic salts according to the alkylene oxide process. By Ziese. n.d. In German. 1.50

891-894 PB L 70356 — Calcium nitrate liquor operation in Oppau. By Friedel and Voigt. 1939. In German. 1.50

895-916 PB L 70356 — Production of metallic manganese by electrolysis of aqueous manganese salt solutions. By Körner. 1939. In German. 2.50

917-927 PB L 70356 — Experiments for the production of sulfur dioxide and waste gases. By Voigt. 1938. In German. 1.50

928-943 PB L 70356 — Extraction and application of inert gases. By Siedler. 1938. In German. 1.50

944-962 PB L 70356 — Filtering of calcium nitrate crude liquor. By Voigt. 1939. In German. 2.00

PB L 70356-S. I.G. FARBENINDUSTRIE A.G., FRANKFURT AM MAIN, GERMANY. Various chemical reports. (FIAT Microfilm Reel C-34, Frames 1-962, abstract cards). 1931-1944. 83p. Price: Microfilm -$2.00 - photostat -$6.00.
Brief abstracts of the individual items on the above reel C 34, PB 70356, prepared by FIAT personnel in Germany.

PB L 73842. I. G. FARBENINDUSTRIE A. G., FRANKFURT AM MAIN, GERMANY. Various flow sheets of the Höchst plant, part 1. (FIAT Microfilm Reel D 23, Frames 1-361) 1921-1932. 361 f. Price: Microfilm-$4.50 - Enlargement print-$36.50
This reel contains flow diagrams for various organic syntheses. Not all diagrams are dated; dates vary between 1921 and 1932. Legends are in German.

PB L 73565. I.G. FARBENINDUSTRIE A.G., GRIESHEIM, GERMANY. Miscellaneous reports. (FIAT Microfilm Reel R 26, Frames 3640-4651, and Frames 4665-4676). 1927-1944. 999 f. Pride: Microfilm-$6.00 - Enlargement Print-$100.00.
This microfilm reel was prepared by FIAT personnel in Germany. 65 individual items are listed below and will be available as enlargement prints. The entire reel may by obtained as a microfilm for $6.00. Please include PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
3640 - 3645 PB L 73565	New conceptions as to the use of graphite as a cooling element for hydrochloric acid, Absorption plants. Feb 27, 1942. In German.	$1.50
3646 - 3663 PB L 73565	Experiments for the elimination of disturbances encountered during the alkali chloride electrolysis with Heilbronn rock salt. By Wilhelm Eckardt. Feb 2, 1942. In German.	2.00
3664 - 3666 PB L 73565	Production of sodium amalgam and chlorine in one cell with a new kind of vertical mercury cathode. By Kopisch. Jan 12, 1942. In German.	1.50
3667 - 3675 PB L 73565	Conveying liquids by horizontally rotating cylinders. (A contribution to the technic of rolls for conveying liquids). By Huttner. Dec 29, 1942. In German.	1.50
3676 - 3687 PB L 73565	Seals against mercury on the V-cells at Hüls. By E. Bittgenbach. May 20, 1943. In German.	1.50
3688 - 3697 PB L 73565	Determination of acidity, or alkalinity of spent electrolyte	

running off from the cells for alkali electrolysis. By Marin. Nov 12, 1943. In German. 1.50

3698 - 3709 PB L 73565 — Raising the efficiency of electrolytic decomposition by a good conducting iron connection between graphite and sodium-amalgam. By Morgenstern. Sep 12, 1941. In German. 1.50

3710 - 3733 PB L 73565 — Influence of metallic contaminations in mercury on the decomposition of sodium-amalgam. By Morgenstern. Sep 8, 1941. In German. 1.50

3734 - 3756 PB L 73565 — Magnetic forces in the disc cell and their influence on the cell operation. By Morgenstern. Apr 11, 1942. In German. 2.50

3757 - 3769 PB L 73565 — Impregnation and production of electrode carbon at Hüls. By Morgenstern. Dec 1, 1942. In German. 1.50

3770 - 3830 PB L 73565 — Direction for the operation of a contact-rectifier. Mar 27, 1944. In German. 6.50

3831 - 3841 PB L 73565 — The cooling water supply for polymerization in summer. By Hoffmann. Jul 22, 1941. In German. 1.50

3842 - 3849 PB L 73565 — Explanations for a rough calculation of heat-exchangers. Aug 21, 1941. In German. 1.50

3850 - 3851 PB L 73565 — Letter of Professor Joh. Körting to Dipl. Ing. Hoffmann with proposals concerning the best way for burning rubber waste. Mar 16, 1943. In German. 1.50

3852 - 3856 PB L 73565 — Report on destyrenization of buna latex by means of the parallel current method. By Feld. May 18, 1943. In German. 1.50

3857 - 3862 PB L 73565 — Destyrenization of buna latex by the parallel current process. Supplement to Dr. Feld's report, Chemische Werke Hüls, of 18 May 1943. Calculation of steam consumption. By Hoffmann. Nov 25, 1943. In German. 1.50

3863 - 3866 PB L 73565 — Behavior of experimental tubes in a turbine-condenser. Dec 17, 1943. In German. 1.50

3867 - 3873 PB L 73565 — Tests of BS-packings at temperatures of 20 and 150° C. By K. Wellinger and others. n.d. In German. 1.50

3874 - 3887 PB L 73565 — Condensation of the three-compound system steam-styrene-butadiene. Feb 11, 1944. In German. 1.50

3888 - 3934 PB L 73565 — Water- and heat economy of the Pm-Works. By Hoffmann. Sep 1940 and May 1943. In German. 5.00

3935 - 3938 PB L 73565 — Talc charging. Dec 1938. In German. 1.50

3939 PB L 73565 — Equipment for grinding and for the removal of dust. In German. 1.50

3940 - 3942 PB L 73565 — Talc separation by centrifugal force in a "Cyclon" apparatus. By Poggenser. Jan 10, 1941. In German. 1.50

3943 - 3978 PB L 73565 — Experiments in the Buna-Werke G.m.b.H., Schkopau. Apr 1940. In German. 4.00

3979 - 3980 PB L 73565 — Grounding of hydrocarbon pipe lines. By Bechdoldt. Dec 5, 1940. In German. 1.50

3981 - 3986 PB L 73565 — Report on the measurement of transition resistances of tubes and of ground resistances. By Sachs. Apr 23, 1940. In German. 1.50

3987 - 3991 PB L 73565 — Current-bar connections to cells for chlorine electrolysis, with aluminum as the conducting material. By Staser. Mar 14, 1944. In German. 1.50

3992 - 3996 PB L 73565 — Losses of Active and Reactive Power in the Carbide-Furnace by Raising the Capacity from 0 to 300 mm. By Stuhl. Dec 29, 1943. In German. 1.50

3997 - 3999 PB L 73565 — Changing of the Current-Lugs in the Carbide-Furnace, Based on Current Distribution Measurements of the Supply System. By Strobl. Dec 21, 1943. In German. 1.50

4000 - 4006 PB L 73565 — Report on the visit at the Kjellberg Special Meeting of Engineers for automatic arc-welding, held in Finsterwalde N.S. on 21 and 22 January 1944. By Hildebrandt. Feb 22, 1944. In German. 1.50

4007 - 4009 PB L 73565 — The Rogowski-Belt, (magnetic voltmeter). By Strobl. Sep 13, 1943. In German. 1.50

4010 - 4019 PB L 73565 — Loss of electrical energy by overloading and soiling of transformers. Sep 23, 1943. In German. 1.50

4020 - 4038 PB L 73565 — Report on salt-carbon tests, carried out during May 24, to July 18, 1943, with the experimental superheater A 65 with additions of residual lime, of clay, and of clay plus residual lime. Sep 6, 1943. In German. 2.00

4039 - 4042 PB L 73565 — Transformer EO 795/10 with taps, transforming 6000 to 100/120/130 volts rewound to Three phases. Explanation for increasing the voltage from 100 volt when using the two-phase winding, to 120 volt, when using the three-phase winding. By Strobl. Nov 13, 1943. In German. 1.50

4043 - 4048 PB L 73565 — Investigations on the magnetizability of steel alloys and on their heating by alternating fields. By Strobl. Nov 3, 1943. In German. 1.50

4049 - 4050 PB L 73565 — Automatic regulation of the electrodes of carbide-furnaces. By Graser. Oct 26, 1943. In German. 1.50

4051 - 4057 PB L 73565 — Installation of iron choke coils in the intermediate-high-tension loop of the provisional furnace 7. By Strobl. Oct 12, 1943. In German. 1.50

751195 O—48——5—39

4058 - 4133 PB L 73565 — Behavior of Buna S with regard to decomposition depending on the factors to be observed during processing. By Filk and Wenning. Dec 10, 1942. In German. 8.00

4134 - 4157 PB L 73565 — Buna of high electric value. By Wolf. Dec 16, 1942. In German. 2.50

4158 - 4164 PB L 73565 — Possibilities with new stabilizers. By Weinbrenner. Dec 10, 1942. In German. 1.50

4165 - 4170 PB L 73565 — Supply of thermally plasticized Buna-S. By Weinbrenner. Dec 10, 1942. In German. 1.50

4171 - 4219 PB L 73565 — The problem of the standardization of Buna S. By Weinbrenner. Dec 10, 1942. In German. 5.00

4220 - 4320 PB L 73565 — Influence of the concentration of Hydrogen ions during coagulation of Buna-S-Latex Type one on the behavior of buna-S rubber in further processing. By Wenning. Apr 13, 1944. In German. 10.50

4321 - 4342 PB L 73565 — The physicochemical picture of the decomposition of Buna S. By Wenning. n.d. In German. 2.50

4343 - 4418 PB L 73565 — Record of the conference of organic chemists on 22 September 1943 at Frankfurt/M. By Schnell. Sep 22, 1943. In German. 8.00

4419 - 4431 PB L 73565 — A method for the rapid determination and approximate quantitative estimation of nickel carbonyl traces in the air. By Grassner. Jan 4, 1939. In German. 1.50

4432 - 4438 PB L 73565 — Report on low temperature starting tests with vehicle engines. By Elflein. Feb 1, 1939. In German. 1.50

4439 - 4463 PB L 73565 — Physical data of iron carbonyl and of nickel carbonyl. In German. 2.50

4464 - 4469 PB L 73565 — Obtaining nickel-carbonyl from nickel scrap of different origins. By Sponn. Dec 30, 1931. In German. 1.50

4470 - 4478 PB L 73565 — Comparative tests concerning the production of cobalt- and nickel-carbonyl at a carbon-monoxide-pressure of 200 and 1000 atmospheres. By Sponn. Mar 13, 1931. In German. 1.50

4479 - 4483 PB L 73565 — Report on tests with nickel-carbonyl and cobalt-carbonyl as anti-knock agents. By W. Wilke. Sep 26, 1927. In German. 1.50

4484 - 4488 PB L 73565 — Welding of carbonyl pure nickel sheets. By Hamprecht. Jan 15, 1935. In German. 1.50

4489 - 4522 PB L 73565 — Suitability of sintered plates with carbonyl iron or carbonyl nickel for cathodes and anodes of alkaline storage batteries. By Ackermann. Jan 12, 1929. In German. 3.50

4523 - 4576 PB L 73565 — Carbonyl nickel production at Oppau. By Haller. Apr 25, 1933. In German. 5.50

4577 - 4589 PB L 73565 — Summarizing report on the state of research work for the production of alkaline storage batteries of carbonyl-nickel and carbonyl-iron. By Ackermann. Dec 20, 1934. In German. 1.50

4590 - 4594 PB L 73565 — Short report on the formation of diacetylene during the production of acetylene by the electric arc-process. By Stadler. May 9, 1930. In German. 1.50

4595 - 4607 PB L 73565 — Crystallographic X-Ray Tests with hexabromobutene. By Eisoner and Brill. Jan 7, 1931. In German. 1.50

4608 - 4611 PB L 73565 — Report on the knocking-behavior of tar-oil with an addition of diacetylene after a long storage of the mixture. By Singer. Jan 27, 1933. In German. 1.50

4612 - 4634 PB L 73565 — Report on tests with diacetylene as an addition to diesel-engine-oils (Tar oil and gas-oil). By Wilke. Jul 29, 1932. In German. 2.50

4635 - 4636 PB L 73565 — Tests with diacetylene as an addition to gas-oil and tar-oil. By Wilke. Jan 10, 1933. In German. 1.50

4637 - 4650 PB L 73565 — Proof and determination of diacetylene, vinylacetylene, and butadiene as contaminations in acetylene produced by the high voltage arc process. By Hilke. Oct 30, 1933. In German. 1.50

4651 PB L 73565 — See frame No. 4612 - 4634.

4652 - 4664 PB L 73565 — These frames are damaged.

4665 - 4668 PB L 73565 — Tests concerning the explosiveness of peroxides and diacetylene. Mar 8, 1934. In German. 1.50

4669 - 4676 PB L 73565 — Detection of the contaminations in acetylene produced by high voltage arcing. By H. Schlüter. Dec 21, 1933. In German. 1.50

PB L 73565-S. I.G. FARBENINDUSTRIE A.G., GRIESHEIM, GERMANY. Miscellaneous reports. (FIAT Microfilm Reel R 26, Frames 3640-4651 and Frames 4665-4676, abstract cards). 1927-1944. 69 p. Price: Microfilm-$2.00 - Photostat-$5.00.
Abstract cards for the items listed on the above microfilm reel R 26, PB 73565, prepared by FIAT personnel in Germany.

PB L 85750. I. G. FARBENINDUSTRIE A. G. HÖCHST, GERMANY. Fire extinguishing agent CB. (Science Translation Service Rept 42) May 1947. 4 p. Price: Microfilm-$1.00 - Photostat-$1.00
This agent consists in the main of monochlorobromomethane and possesses the following properties and advantages: It is a colorless liquid which is definitely stable, does not separate, and freezes only at about -90° C (-129° F); it boils at ordinary pressure between 60° and 90° C (140°-194° F) it can be stored and shipped in ordinary liquid containers (drums, cans, glass, etc.); no special devices are required for filling and emptying (vapor pressure is apparent from the attached curves); it does not attack either in the cold or at boiling temperature the metals commonly employed for transport and storage vessels, fire-extinguishing devices, fittings, etc.; it does possess narcotic properties but as pronounced toxicity; it forms practically no phosgene in the presence of hot metal parts; and it possesses so low a conductivity that it can be considered as a nonconductor and, therefore, can be employed for extinguishing fires in high-tension installations and the like. See also PB L 85749, this issue, "Process for the preparation of fire extinguishing agent CB."

PB L 70361. I.G. FARBENINDUSTRIE A. G, HÖCHST, GERMANY. Reports on the preparation of intermediates and inorganic chemicals. Machine shop pamphlets. (FIAT Microfilm C 40, Frames 6344-7292) 1929-1946. 949f.
Price: Microfilm- $6.00 - Enlargement print- $95.00
This FIAT microfilm reel consists of approximately 232 individual items. The first seven items (frames 6344-6644) deal with machine shop tools and machine shop practice. The bulk of the material, however, deals with the production of intermediates at the Hoechst plant. The last four items (frames 7237-7292) deals with the production of a few inorganic compounds. The individual items are listed below and will be available as enlargement prints. Please include PB and frame numbers when ordering items from this microfilm reel. In German.

Frames	Title	Price
6344-6367 PB L 70361	Calculation methods for machine shops. n.d. In German.	4.00
6368-6425 PB L 70361	Machine tool pamphlets. nd. In German.	4.00
6426-6454 PB L 70361	Calculation directions for steam and pressure vessels. Dec 1932 to May 1941. In German. A large portion is illegible.	3.00
6455-6553 PB L 70361	German standards for machine shops. Dec 1929 to Oct 1942. In German.	10.00
6554-6575 PB L 70361	German standards for railroad vehicles. Jan and Oct 1941. In German.	2.50
6576-6589 PB L 70361	Welding operations. Sep 1939. In German.	1.50
6590-6644 PB L 70361	Tanks and vessels. Nov 1932 to May 1939. In German.	5.50
6651 6769-6770 PB L 70361	Aminomethoxy-diphenylene oxide. By Brandel and Lanz. Feb 22, 1946. Dec 12, 1938. In German. Poor legibility.	1.50
6652 PB L 70361	p-Aminophenol HCl. By Petri. May 2, 1946. In German.	1.50
6653 PB L 70361	p-Aminophenol. By Cramer. Nov 27, 1945. In German.	1.50
6654 PB L 70361	"Chlorhydrazinsäure 4". (2-chlorophenyl-hydrazine-4-sulfonic acid. By Brandel. Feb 22, 1946. In German. Poor legibility.	1.50
6655 PB L 70361	Chloro-p-nitraniline. By Haller. Apr 25, 1946. In German.	1.50
6656 PB L 70361	"Chlorpyrazolsäure 4". By Brandel. Feb 22, 1946. In German.	1.50
6657-6659 PB L 70361	Naphthol tanning material FUN. By Thomsen. May 2, 1946. In German.	1.50
6660-6662 PB L 70361	Tanning material GB. Nov 15, 1945. In German.	1.50
6663-6664 PB L 70361	Tanning material G and G new. By Thomsen. Nov 14, 1945. In German.	1.50
6665-6668 PB L 70361	Tanning Material G 41. By Thomsen. nd. In German. Frame 6667 is not very legible.	1.50
6669-6670 PB L 70361	Phenylglycine. By Tepter. Jul 30, 1940. In German.	1.50
6671-6673 PB L 70361	H -acid (1-amino-8-naphthol-3,6-disulfonic acid). By Waldmueller. May 29, 1940. In German.	1.50
6674-6675 PB L 70361	Metanilic acid. (1-amino-benzene-3-sulfonic acid). By Waldmueller. May 23, 1946. In German.	1.50
6676 PB L 70361	3-Methoxy-diphenylene oxide. By Bandel. Feb 22, 1946. In German.	1.50
6677-6678 PB L 70361	Sodium naphthalene-1-sulfonate. By Persch. Jan 22, 1946. In German.	1.50
6679-6680 PB L 70361	"p-Nitrochlorsaure" (4-nitro-1-chloro-benzene-2-sulfonic acid). By Waldmueller. Mar 25, 1946. In German.	1.50
6681 6997-7000 PB L 70361	Nitromethoxy-diphenylene oxide. By Bandel. Feb 22 1946 and Dec 12, 1938. In German.	1.50
6682-6684 PB L 70361	p-Nitrophenol. By Persch and Cramer. Jan 25, 1946 and Nov 27, 1945. In German.	1.50
6685-6686 PB L 70361	4-Nitro-O-toluidine. By Cramer. Jun 7, 1946. In German.	1.50
6687-6688 PB L 70361	"Oelbase". (2-nitro-p-toluidine). By Cramer. May 23, 1946. In German.	1.50
6689 PB L 70361	m-Phenylenediamine from m-dinitrobenzene. By Bandel. May 26, 1946. In German.	1.50
6690 PB L 70361	m-Phenylenediamine from m-nitraniline. By Bandel. Mar 26, 1946. In German. Poor legibility.	1.50
6691 PB L 70361	p-Phenylenediamine crude, moist. Mar 28, 1946. In German.	1.50
6692 PB L 70361	"Phenyl paramin" -hydrochloride. By Bandel. Mar 12, 1946. In German.	1.50
6693-6694 PB L 70361	Phenylpyrazolonecarboxylamide moist. (1-phenyl-5-pyrazolone-3-carboxylamide). By Waldmueller. May 9, 1934. In German.	1.50
6695-6698 PB L 70361	Tanigan extra P. Jan 25 1946. In German. Largely illigible.	1.50
6699-6700 PB L 70361	Tanigan SK from Weyloil. By Thomsen. May 23, 1946. In German. Poor legibility.	1.50
6701-6705 PB L 70361	Tanigan SK and Tanigan SK 26. By Waldmueller. Nov 14, 1945. In German.	1.50
6706 PB L 70361	o-Toluidine-benzene-sulfamide. ($C_6H_4^{CH_3}NHO_2S-C_6H_5$). By Cramer. Mar 21, 1946. In German.	1.50
6707-6709 PB L 70361	Naphthylamine- 3,6,8-trisulfonic acid. (T-acid - "Koch's" acid). By Waldmeuller. Mar 23, 1946. In German.	1.50
6710-6711 PB L 70361	Pure chloral or chlorinated acetal. By Petri. n.d. In German.	1.50
6712-6715 PB L 70361	"Acetdinitramin F" moist. (1-acetamido-2,4-dinitrobenzene. By Waldmueller. Mar 19 and Oct 11, 1934. In German.	1.50
6716-6718 PB L 70361	"Dinitracet F". Dec 11, 1932. In German.	1.50
6719-6720 PB L 70361	Acetyldinitraniline. Jun 29, 1931. In German.	1.50
6721-6724 PB L 70361	Acetoacetanilide. By Mengel. Jan 20, 1940. In German.	1.50
6725-6730 PB L 70361	Acetoacetyl-o-chloranilide. Oct 8, 1931. In German.	1.50
6731-6732 PB L 70361	"Acetessigorthosid" (acetoacetyl o-anisidine). By Mengel. May 30, 1942. In German.	1.50
6733-6735 PB L 70361	Acetoacetyl-O-anisidine and acetoacetyl-as-m-xylidide. By Mengel. May 16, 1939. In German.	1.50
6736-6737 PB L 70361	Acetoacetyl-o-toluidide. By Mengel. Apr 30, 1942. In German.	1.50

6738-6739 PB L 70361 — Acetoacetyl-m-xylidide. By Mengel. Jun 3, 1941. In German. 1.50

6740-6741 PB L 70361 — "Ethane salt S" in solution. By Lanz. Sep 6, 1943. In German. 1.50

6742-6743 PB L 70361 — "Oxethane salt" from alcohol. By Mengel. Aug 8, 1940. In German. 1.50

6744-6745 PB L 70361 — "Ethyl salt" in solution (Sodium ethyl sulfate). By Waldmueller. Nov 14, 1941. In German. 1.50

6746-6747 PB L 70361 — Ethyl sulfuric acid and diethyl sulfate. By Waldmueller. Nov 23, 1934. In German. 1.50

6748-6750 PB L 70361 — Ethyl sulfinic acid. By Bauerlein. Feb 11, 1936. In German. 1.50

6751 PB L 70361 — m-Amino benzaldehyde pure. n.d. In German. 1.50

6752-6753 PB L 70361 — "Amino HS". By Lanz. Mar 17, 1937. In German. 1.50

6754-6761 PB L 70361 — p-aminobenzylsulfonic acid. By Fischer IV. Mar 8, 1937. In German. 1.50

6762 PB L 70361 — m-Aminocarboxypyrazolone. By Lanz. Jul 10, 1937. In German. 1.50

6763 PB L 70361 — "Amino-J-pyrazolone". By Lanz. Oct 11, 1937. In German. 1.50

6764-6765 PB L 70361 — "Amino-J-acid hydrazine". By Lanz. Sep 29, 1937. In German. 1.50

6766-6768 PB L 70361 — "Amidol acid moist" (1-amino-2-naphthol-4-sulfonic acid). By Waldmueller. May 14, 1937. In German. 1.50

6769-6770 PB L 70361 — See Frame 6661

6771-6773 PB L 70361 — m-Aminopyrazolone. By Lanz. Aug 4, 1938, Apr 6, 1937. In German. 1.50

6774-6775 PB L 70361 — m-Aminophenylmethyl pyrazolone. n.d. In German. 1.50

6776-6777 PB L 70361 — 1-(p-Aminophenyl)-3-methyl-5-pyrazolone. Jun 22, 1930. In German. 1.50

6778 PB L 70361 — Aminosulfophenyl methyltaurine. By Lanz. Apr 18, 1939. In German. 1.50

6779-6784 PB L 70361 — Aniline. By Grom. Aug 18, 1930. In German. 1.50
Partly illegible.

6785-6786 PB L 70361 — m-Benzoic acid hydrazine. By Lanz. Feb 10, 1937. In German. 1.50

6787-6804 PB L 70361 — Benzene distillation. By Zedel and Hotz. Nov 20, 1925 and Nov 15 and Jan 16, 1935. In German. 2.00
Several frames are not very legible.

6805 PB L 70361 — Benzene sulfamide pure. By Lanz. Apr 4, 1943. In German. 1.50

6806-6807 PB L 70361 — "B-Essigester", (B-acetic ester) By Lanz. Feb 18, 1937. In German. 1.50

6808-6816 PB L 70361 — "Blaubase F", (Blue Base F). (4-amino-4'-methoxy-diphenylamine, sulfate or hydrochloride). By Waldmueller and Lanz. Feb 20, 1940 and Jun 6, 1942. In German. 1.50

6817-6818 PB L 70361 — "Blaubase FG," (Blue Base FG,) (4-amino-3-methoxy diphenylamine.) By Lanz. Jun 6, 1942. In German. 1.50

6819-6822 PB L 70361 — "Bronner's acid-hydrazine". By Lanz. May 7 and Jun 7, 1937. In German. 1.50

6823-6826 PB L 70361 — Orange base, (3-methyl-5-pyrazolone of 2-naphthylamine-6-sulfonic acid) = Broenner's acid pyrazolone. Jul 12, 1932 In German. 1.50

6827-6828 PB L 70361 — Carbethoxy pyrazolone. By Lanz. Jan 6, 1937. In German. 1.50

6829-6830 PB L 70361 — "Carbathoxypyrazolsäure 4". By Lanz. Feb 23, 1937. In German. 1.50

6831-6833 PB L 70361 — Redissolving crude carbazole. By Moog. Jun 9, 1941. In German. 1.50
Poor legibility.

6834-6835 PB L 70361 — Carboxypyrazolone. By Lanz. Feb 10, 1937. In German. 1.50

6836 PB L 70361 — "Carboxypyrazolsäure" By Lanz. Mar 28, 1940. In German. 1.50

6837 PB L 70361 — "CA-acid" (2-chloro-6-amino-4-sulfo-1-benzoic acid). By Waldmueller. May 13, 1937. In German. 1.50

6838-6839 PB L 70361 — 4-sulfo-2-amino-benzoic acid. By Hagenboecker. Dec 11, 1930. In German. 1.50

6840-6843 PB L 70361 — "Chlordiazomidolsäure", (5-chloro-1-diazo-2-naphthol-4-sulfonic acid.) By Waldmueller. Nov 27, 1934. In German. 1.50

6844-6845 PB L 70361 — Chlorodihydroxydiphenyl. By Lanz. Dec 10, 1938. In German. 1.50

6846-6847 PB L 70361 — "m-chlorhydrazin". By Lanz. May 9, 1939. In German. 1.50
Poor legibility.

6848 PB L 70361 — 2-Chlorophenylhydrazine-4-sulfonic acid, (Chlorgelbsäure). Oct 1930. In German. 1.50
Poor legibility.

6849-6850 PB L 70361 — "Chlorhydrazinsäure 5". By Lanz. Jul 28, 1939. In German. 1.50
Poor legibility.

6851-6853 PB L 70361 — "Chlorkresidin", (3-amino-4-methoxy-6-chloro-1-methyl benzene). By Hotz. Sep 11, 1934. In German. 1.50

6854-6857 PB L 70361 — "Chlormetatoluidinsäure", (2-chloro-6-toluidine-4-sulfonic acid). By Waldmueller. Nov 23, 1934. In German. 1.50
Original numbering scheme.

6858-6859 PB L 70361 — "Chlormethylcarbathoxypyrazolsäure". By Lanz. Jul 10, 1937. In German. 1.50

6860-6861 PB L 70361 — "Chlormethylpyrazolsäure". By Lanz. Feb 11, 1937. In German. 1.50

6862-6863 PB L 70361 — Chloronitraniline. By Lanz. Feb 18, 1937. In German. 1.50

6864 PB L 70361 — "Chlororthotoluidinsäure", pure. By Lanz. May 20, 1937. In German. 1.50

6645-6650 PB L 70361 — Instructions for making drawings. Jan and Feb 1936. In German. 1.50

6865-6869 PB L 70361 — Chlorophenylquinone. By Lanz. Dec 10, 1938. In German. 1.50

6870-6873 PB L 70361 — 2'-chlorophenyl-benzoquinone. By Schimmelschmidt. Feb 5, 1937. In German. 1.50

6874-6875 PB L 70361 — "m-Chlorpyrazolon". By Lanz. Mar 1, 1937. In German. 1.50

6876 PB L 70361 — 2-Chlorophenylmethylpyrazolone-4-sulfonic acid (Chlorgelbbase.) Oct 6, 1930. In German. 1.50

6877 PB L 70361 — 2-Chlorophenylmethylpyrazolone-5-sulfonic acid (Hydrochloregelbbase). Oct 1930. In German. 1.50

6878-6879 PB L 70361 "Chlorosulfocarbonsäure 24" (Chlorosulfocarboxylic acid 24). By Lanz. Aug 12, 1937. In German. 1.50

6880-6883 6886 PB L 70361 Echtrot TR-Reinbase, (4-chloro-o-toluidine)-(Fast Red TR Pure Base.) Feb 8, 1940. In German. 1.50

6884-6885 PB L 70361 "Chlorotoluidine salt 52 pure dry" (4-chloro-o-toluidinehydrochloride.) Feb 8, 1940. In German. 1.50

6886 PB L 70361 See frames 6880-6883

6887-6889 PB L 70361 m-Chloro-toluene. By Moog. Aug 17, 1939. In German. 1.50

6888 PB L 70361 Missing.

6890 PB L 70361 "Chlortoluolparasäure". (Sodium-2-chlorotoluene-4-sulfonate). By Waldmueller. May 13, 1937. In German. 1.50

6891-6892 PB L 70361 "Chlortolylhydrazinsäure 5". By Lanz. Jan 28, 1937. In German. 1.50

6893 PB L 70361 "C-acid pyrazolone". By Lanz. Apr 30, 1937. In German. 1.50

6894-6895 PB L 70361 Diethyl sulfate. By Lanz. Jul 19, 1940. In German. 1.50

6896 PB L 70361 "Nitrodiazo-1,2,4-Säure". By Funke. Apr 1, 1941. In German. 1.50

6897-6899 PB L 70361 "Diazoamidol acid, (Diazoamidolsaeure), (Diazo-1,2,4-amino-naphthol sulfonic acid). By Waldmueller. May 14, 1937. In German. 1.50

6900-6901 PB L 70361 m-Dichlorobenzene. By Lanz. Jan 27, 1941. In German. 1.50

6902-6903 PB L 70361 Dimethyl sulfate. By Lanz. Jan 24, 1941. In German. 1.50

6904-6905 PB L 70361 "Acetdinitramin P" moist. (1-acetamide-2,4-dinitrobenzene). Mar 15, 1940. In German. 1.50

6906 PB L 70361 "Dinitramin" (2,4-dinitraniline). Mar 12, 1940. In German. 1.50

6907 PB L 70361 Dinitrochlorobenzoic acid. By Waldmueller. Jun 1937. In German. 1.50

6908 PB L 70361 "Echtbraun -V- Base". By Heyna. Apr 24, 1940. In German. 1.50

6909-6914 PB L 70361 Fire extinguishing agent CB (Chlorobromomethane). By Moog. Aug 4, 1943. In German. 1.50

6915-6916 PB L 70361 Fluorobenzene. By Mahler. Aug 9, 1943. In German. 1.50

6917-6918 PB L 70361 Frigen (dichlorodifluoromethane). (Freon 12). By Waldmueller. Mar 13, 1941. In German. 1.50

6919-6920 PB L 70361 "F-Salz" (2,7-naphthol sulfonic acid F). By Waldmueller. Nov 26, 1934. In German. 1.50

6921 PB L 70361 Gerbstoff GB (Tanning material GB). By Thomsen. Apr 7, 1943. In German. 1.50

6922-6923 PB L 70361 "Gix" (agent 2474, or "trichlorfluorbenzol")(difluorodiphenyltrichloroethane). By Lanz. Mar 10, 1944. In German. 1.50

6924-6925 PB L 70361 Hansagruen GS (Hansa green). By Waldmueller. Jun 1937. In German. 1.50

6926-6927 PB L 70361 BB-hydrazine. By Lanz. Mar 23, 1937. In German. 1.50

6928-6929 PB L 70361 "G-Saeure-hydrazin" (G-acid hydrazine). By Lanz. Apr 16, 1937. In German. 1.50

6930 PB L 70361 2 GK-hydrazine. By Lanz. Nov 14, 1936. In German. 1.50

6931-6934 PB L 70361 5 GK-hydrazine. By Lanz. Feb 13, 1937. In German. 1.50

6935-6936 PB L 70361 1-Phenylhydrazine-2,5-disulfonic acid. May 12, 1930. In German. 1.50

6937 PB L 70361 "Hydrazinmetasäure". By Lanz. Feb 1, 1941. In German. 1.50

6938-6939 PB L 70361 "Hydrazinorthosäure". By Lanz. Feb 8, 1937. In German. 1.50

6940-6941 PB L 70361 "Hydrazinparasäure". By Lanz. Mar 18, 1937. In German. 1.50

6942 PB L 70361 "Hydrobenzamid". By Lanz. May 19, 1937. In German. 1.50

6943 PB L 70361 Isophthaloyl chloride, crude. By Lanz. Mar 17, 1939. In German. 1.50

6944-6945 6994-6996 PB L 70361 "Ledersäure" (leather acid) (6-chloro-2-aminotoluene-4-sulfonic acid). "Nitro-ledersäure" (nitro leather acid) (6-chloro-2-nitrotoluene-4-sulfonic acid). By Waldmueller. Sep 12, 1934 and Jun 1937. In German. 1.50

6946 PB L 70361 2-Amino-6-chloro-p-toluene sulfonic acid. By Vossen. Jun 21, 1927. In German. 1.50

6947-6948 PB L 70361 "Metanilsalyl sulfon". By Lanz. Feb 26, 1937. In German. 1.50

6949-6951 PB L 70361 3-Methoxy-diphenylene oxide. Dec 30, 1938 and Mar 15, 1937. In German. 1.50

6952-6958 PB L 70361 "p'-Methoxyphenylparasäure", separated, and "Blaubase P" (Blue Base P) moist. By Waldmueller. Mar 20, 1939. In German. 1.50

6959 PB L 70361 "Methylpyrazolsäure". 1-(2'-methyl-4'-sulfo)-phenyl-3-methyl-pyrazolone. Jan 19, 1940. In German. 1.50

6960-6961 PB L 70361 Sodium methyl sulfate. Mar 13, 1936. In German. 1.50

6962-6965 PB L 70361 Naphthalenedisulfonic acid (= naphthalene 2,7-disulfonic acid). By Waldmueller. Oct 4, 1937. In German. 1.50

6966-6968 PB L 70361 Naphthol AS-G (diacetoacetyl-o-tolidide). By Mengel. Mar 27, 1941. In German. 1.50

6969-6970 PB L 70361 Naphthol AS-LG. By Mengel. Dec 21, 1940. In German. 1.50

6971-6972 PB L 70361 Naphthol AS-L3G. By Mengel. Dec 21, 1940. In German. 1.50

6973-6976 PB L 70361 Naphthol AS-L4G. By Walz. Sep 10, 1936. In German. 1.50

6977 PB L 70361 Naphthol SO 313. By Schuhmacher. Jan 15, 1937. In German. 1.50

6978-6979 PB L 70361 Naphthol for I3GH (Rapidechtgelb). By Mengel. Aug 20, 1941. In German. 1.50

6980-6981 PB L 70361 "Brenzkatechinnaphtol" ("pyrocatechol naphthol") for Rapidogen Golden Yellow IGL. By Mengel. Apr 17, 1940. In German. 1.50

6982-6983 PB L 70361 "Metanitroaldehyd", pure. By Lanz. May 19, 1937. In German. 1.50

6984 PB L 70361 "Nitro BB". Mar 17, 1937. In German. 1.50

6985-6986 PB L 70361 "m-Nitrocarboxypyrazolon". By Lanz. Mar 1, 1938. In German. 1.50

6987 PB L 70361 Nitro-CA-acid (5-nitro-2-chloro-4-sulfobenzoic acid). By Waldmueller. May 15, 1937. In German. 1.50

6988-6989 PB L 70361 "p-Nitrochlorsäure" (= 6-chloro-3-nitrobenzene-1-sulfonic acid). By Waldmueller. May 14, 1937. In German. 1.50

6990-6991 PB L 70361 m-nitrohydrazine. Aug 5, 1938. In German. 1.50

6992-6993 PB L 70361 "Paranitrohydrazin". By Lanz. Dec 14, 1937. In German. 1.50

6994-6996 PB L 70361 See frames 6944-6945.

6997-7000 PB L 70361 See frame 6681.

7001 PB L 70361 Benzoxazolone. By Schmid. n.d. In German. 1.50

7002 PB L 70361 5-Nitro-benzoxazolone. By Schmid. n.d. In German. 1.50

7003-7004 PB L 70361 5-Nitro-2-amino-phenol. By Schmid. n.d. In German. 1.50

7005-7006 PB L 70361 "Nitroorthokresol" 4. By Lanz. Sep 16, 1938. In German. 1.50

7007-7008 PB L 70361 "Nitroothokresolmethyl 4" By Lanz. Nov 10, 1938. In German. 1.50

7009-7012 PB L 70361 "m-Nitropyrazolon". By Lanz. Jan 7, 1938. In German. 1.50

7013-7014 PB L 70361 "p-Nitropyrazolon". By Lanz. Jan 7, 1938. In German. 1.50

7015-7016 PB L 70361 Nitro RD. By Lanz. Jun 29, 1937. In German. 1.50

7017-7018 PB L 70361 Nitrosulfophenylmethyltaurine. By Lanz. Mar 24, 1939. In German. 1.50

7019-7021 PB L 70361 "Phenylbase dest". (= 4,4'-diaminodiphenylmethane). By Waldmueller. Mar 25, 1942. In German. 1.50

7022 PB L 70361 This frame is missing.

7023-7025 PB L 70361 "Phenylparasin." By Lanz. Jan 23, 1941. In German. 1.50

7026 PB L 70361 BB-pyrazolone. By Lanz. Apr 17, 1937. In German. 1.50

7027-7029 PB L 70361 Phenylpyrazolone carboxylic amide = 1-phenyl-6-pyrazolone-3-carboxylic amide. By Waldmueller. Jun 9, 1934. In German. 1.50

7030-7031 PB L 70361 Pyrazole acid 2BZL. (pyrazolsaeure 2BZL). By Lanz. May 14, 1937. In German. 1.50

7032 PB L 70361 Pyrazolone 2 GL. By Lanz. Mar 6, 1939. In German. 1.50

7033-7034 PB L 70361 "Pyrazolsaeure 3." By Lanz. Jun 4, 1937. In German. 1.50

7035 PB L 70361 Metasulfophenylmethylpyrazolon". By Kammerer. Mar 13, 1928. In German. 1.50
Poor legibility.

7036-7037 PB L 70361 "Pyrazolsaeure 4". Aug 5, 1938. In German. 1.50

7038-7039 PB L 70361 RD-Base. By Lanz. Dec 10, 1938. In German. 1.50

7040-7041 PB L 70361 S-Resorcylic acid (= 2,4-dihydroxy benzoic acid). By Lanz. May 15, 1930. In German. 1.50

7042 PB L 70361 "Salylhydrazin". By Lanz. Sep 24, 1940. In German. 1.50

7043-7046 PB L 70361 "S-salz Bz." By Lanz. Mar 16, 1938. In German. 1.50

7047 PB L 70361 Sulfanille acid, pure. By Lanz. Feb 7, 1944. In German. 1.50

7048-7049 PB L 70361 "Sulfonhydrazin". By Lanz. Dec 21, 1936. In German. 1.50

7050 PB L 70361 "Sulfonpyrazolon". By Lanz. Jul 13, 1937. In German. 1.50

7051 PB L 70361 Terephthalyl chloride, crude. By Lanz. Nov 26, 1940. In German. 1.50

7052-7053a PB L 70361 Terephthaloyl chloride. By Kissling. Feb 9, 1933. In German. 1.50

7053b-7054 PB L 70361 "T-acetic ester". = terephthaloyl-bis-acetic acid, diethyl ester. By Schuhmacher. Mar 6, 1937. In German. 1.50

7055-7057 PB L 70361 Tetranitrocarbazole. By Lanz. Dec 17, 1940. In German 1.50

7058-7059 PB L 70361 "Thiazolhydrazin". By Lanz. Oct 11, 1937. In German. 1.50

7060-7061 PB L 70361 3-Methyl-5-pyrazolone derivative of dehydro-thio-p-toluidine sulfonic acid. By Brune. Jul 7, 1932. In German. 1.50

7062-7065 PB L 70361 p-Toluenesulfonic acid. By Vossen and Others. Jul 17, 1930, May 22, 1939 and Sep 18, 1944. In German. 1.50

7066 PB L 70361 "Tolyl diaminsalz" (4,4'-diamino-2,2'-dimethyldiphenylmethane. By Waldmueller. Jun 1937. In German. 1.50

7067-7072 PB L 70361 "Tolyhydrazinsäure" (1-methyl-2-phenyl-hydrazine-5-sulfonic acid). By Lanz. Dec 11, 1936. In German. 1.50

7073-7076 PB L 70361 "Trichlorfluorbenzol" (= agent 2474 = Gix). (difluorodiphenyltrichloroethane). By Scherer and Moog. n.d. In German. 1.50

7077 PB L 70361 "Trichlorgelbbase". (= 5-sulfo-2',3',6',-trichlorophenylmethyl pyrazolone.) Jan 25, 1931. In German. 1.50

7078 PB L 70361 "Trichlorgelbsaeure." (2,3,6-trichlorophenyl-hydrazine-5-sulfonic acid). Jan 23, 1931. In German. 1.50

7079 PB L 70361 Trichloromethyl-m-benzoylchloride. By Schuhmacher. Jan 28, 1941. In German. 1.50

7080 PB L 70361 m-Trifluoromethylbenzoylfluoride. By Eckelmann. Jan 10, 1941. In German. 1.50

7081-7083 PB L 70361 "Variaminblausalz B". (= 4'-methoxydi-phenylamine-4-diazoniumchloride.) By Rotz. Mar 27, 1930. In German. 1.50

7084-7094 PB L 70361 Dyestuff intermediates (costs) By Scherer. Mar 13, 1946. In German. 1.50

7095-7097 PB L 70361 Nako-dyes (=Naphthol AS-commission). Sep 11, 1945. In German. 1.50

7098-7099 PB L 70361 Ethylnitrite. By Lanz. Apr 9, 1943. In German. 1.50
Frame 7099 (diagram) is illegible.

7100-7103 PB L 70361 Ethyloil I (aethyloel I) = (potassium ethylsulfate). By Lanz. May 14, 24, 1940. In German. 1.50
Illegible

7104 PB L 70361 Dyestuff intermediates. (costs) By Waldmueller. Apr 10, 1946. In German. 1.50

7105 PB L 70361 p-benzyl benzoic acid. By Scherer. Sep 24, 1945. In German. 1.50

7106 PB L 70361 — Methylbromide. By Lanz. Jan 6, 1944. In German. 1.50

7107 PB L 70361 — Carbazole purification. By Lanz. Feb 15, 1942. In German. 1.50

7108-7111 PB L 70361 — "Bariumchloron" = sodium 1,2-dichlorobenzene-4-sulfonate. By Waldmueller. Dec 4, 1940. In German. 1.50

7112 PB L 70361 — Dichlorodinitrocarbazole. By Lanz. Nov 9, 1942. In German. 1.50

7113-7115 PB L 70361 — Diketene. (storage problems). By Mengel. Nov 13, Feb 3, 1941. In German. 1.50

7116, 7122 PB L 70361 — 2,4-Dinitrophenol. By Lanz. Nov 20, 1944. In German. 1.50

7117-7121 PB L 70361 — 2,4-Dinitro-diphenylamine. By Mahler. Nov 15, 1940. In German. 1.50

7122 PB L 70361 — See frame 7116

7123-7126 PB L 70361 — Developer A and H. (sodium β-naphtholate and m-toluylenediamine). By Lanz and Scherer. Mar 29, 1938, Mar 20, 1946. In German. Poor legibility. 1.50

7127-7128 PB L 70361 — "Harz - OL" (Resin -OL). By Waldmueller. Jan 21, 1943. In German. 1.50

7129-7132 PB L 70361 — Hertolan (2-naphthylbenzoate). By Brune and Kracker. Feb 22, 1939 and May 2, 1938. In German. 1.50

7133 PB L 70361 — 1-Amino-naphthalene-3,8-disulfonic acid ("amino-epsilon-acid"). By Scherer. Jul 19, 1945. In German. 1.50

7134 PB L 70361 — Orthanilic acid. By Waldmueller. Apr 10, 1946. In German. 1.50

7135-7137 PB L 70361 — Sodium p-phenolsulfonate. (1-hydroxybenzene-4-sulfonic acid). By Waldmueller. Dec 6, 1940. In German. 1.50

7138-7142 PB L 70361 — o-phenylenediamine. By Mahler. Jan 23, 1939. In German. 1.50

7143-7145 PB L 70361 — Phloroglucinol (= 1,3,5-trihydroxybenzene). By Waldmueller. Mar 14, 1946. In German. 1.50

7146-7151 PB L 70361 — Phosphorus trichloride. By Cramer. Apr 9, 1946. In German. Very poor legibility. 1.50

7152-7166 PB L 70361 — Photographic developer. By Hofrat and Eder. 1942. In German. Partly illegible. 1.50

7167-7174 PB L 70361 — Photographic developer. By Scherer. Nov 12, 14, 17, 1945 and Oct 23, 1945. In German. 1.50

7175-7180 PB L 70361 — Quinone/hydroquinone. By Siebert and others. Apr 21, 1937. In German. 1.50

7181-7182 PB L 70361 — "Selloxin I" and "Selloxin 50". By Lanz. Nov 2, 1942. In German. 1.50

7183-7187 PB L 70361 — "Gelbsehl S" = "Tetra S" = tetranitrodiphenylamine sulfone. By Lanz. May 17, 1943. In German. 1.50

7188-7191 PB L 70361 — "Thiuram" (tetramethylthiuram-disulfide). In script. By Lanz. Dec 30, 1942. In German. 1 frame (drawing illegible). 1.50

7192 PB L 70361 — "Paratoluylendiamin" (2,5-diaminotoluene). By Scherer. Nov 12, 1945. In German. 1.50

7193-7195 PB L 70361 — Trichlorotrinitrobenzene. By Lanz. Oct 8, 1941. In German. 1.50

7196 PB L 70361 — "Tutogensaeure". By Hilcken. Aug 1, 1944. In German. 1.50

7197-7203 PB L 70361 — Vulcanization accelerators. (costs). By Scherer. Nov 9, 1945. In German. Partly illegible. 1.50

7204-7213 PB L 70361 — Fluorine chemistry. By Scherer. May 9, 1946. In German. 1.50

7214-7236 PB L 70361 — Trichloroacetamide. By Dachlauer. Apr 12, 1938, Apr 13, 1939, May 14, 1937 and Apr 26, 1937. In German. 2.50

7237 PB L 70361 — Sulfur. Feb 6, 1946. In German. 1.50

7238-7239 PB L 70361 — Sodium sulfide. By Kunzer. Nov 19, 1945. In German. 1.50

7240 PB L 70361 — Antichlor. ($Na_2S_2O_3$). n.d. In German. 1.50

7241-7292 PB L 70361 — Sodium sulfide. n.d. In German. Major portion in script. Four additional frames. 6.00

PB L 70361-S. I.G. FARBENINDUSTRIE A.G., HOCHST, GERMANY. Reports on the preparation of intermediates and inorganic chemicals. Machine shop pamphlets. (FIAT Microfilm Reel C-40, Frames 6344-7292, abstract cards.) 1929-1946. 232p. Price: Microfilm -$5.00 - photostat -$16.00.
Brief abstracts are presented of the individual items of microfilm reel C-40 (PB 70361), listed above. These abstracts were prepared by FIAT investigators in Germany.

PB L 73958. I. G. FARBENINDUSTRIE A. G., HÖCHST, GERMANY. Technical drawings: aluminum polymerization column; mercury cell. (FIAT Microfilm Reel AA 226, Frames 1-3c) 1941. 14 f. Price: Microfilm-$1.00 - Enlargement print-$1.50
The film contains photos of technical drawings pertaining to an aluminum polymerization column and to a mercury cell. No accompanying text available. Captions in German.

PB L 73987. KALI FORSCHUNGSANSTALT G.M.B.H., BERLIN, GERMANY. Various chemical reports. (FIAT Microfilm Reel B 260, Frames 1-222). 1938-1940. 222 f.
Price: Microfilm-$3.00 - Enlargement Print-$22.50
This reel was prepared by FIAT investigators in Germany. Individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $3.00. Please include PB and frame numbers when ordering individual items. In German.

Frames	Title	Price
1-15 PB L 73987	Influence of the composition of magnesium chloride solution on Sorel cements or xylolith. By Hoefer and Tanne. Dec 16, 1938. In German.	$1.50
16-30 PB L 73987	The pH-values in the system water-magnesium hydroxide-magnesium chloride, and their technical measurement. By Katz. May 4, 1940. In German.	1.50
31-46 PB L 73987	The grain problem in the crystallization technique of the German potash industry. By Serowy. n.d. In German.	2.00
47-55 PB L 73987	Solution and conversion rates of kieserite and langbeinite. By J. d'Ans. May 4, 1940. In German.	1.50

56-66 PB L 73987 — Some examples from practice for the application of the parallel projection in spatial solubility diagrams. By A. Arens. n.d. In German. 2.00

67-87 PB L 73987 — Monograph on bromine. By P. Hoefer. n.d. In German. 2.50

88-98 PB L 73987 — Determination of calcium by a single precipitation as oxalate in the presence of much magnesium. By B. Wanderowsky. n.d. In German. 1.50

99-116 PB L 73987 — Examination of various instructions for the decomposition by the Kjeldahl method. By F. Hauterberg and H. Benischke. n.d. In German. 2.00

117-139 PB L 73987 — The air adsorption of soils and soil constituents and its influence upon the determination of the pore volume and the specific weight of surface soils with the compressed air pycnometer. By F. Alten and H. Loopmann. n.d. In German. 2.50

140-152 PB L 73987 — The organic substance of the soil and its effect upon the metabolism of the nutrient substances of the soil. By A. Jakobi. n.d. In German. 1.50

153-169 PB L 73987 — Examinations on the problem of salt drying in the shaft furnace. By B. Kassner. n.d. In German. 2.00

170-184 PB L 73987 — Technical experiments on the evaporation of final liquors in the vacuum. By E. Ritter. n.d. In German. 1.50

185-232 PB L 73987 — Ideal and real crystal. By F. Serowy. n.d. In German. 4.00

PB L 73987-S KALI FORSCHUNGSANSTALT G.M.B.H., BERLIN, GERMANY. Various chemical reports. (FIAT Microfilm Reel B 260, Frames 1-222, abstract cards). 1938-1940. 27 p. Price: Microfilm-$1.00 - Photostat-$2.00
Brief abstracts of the individual items on the above reel B 260, PB 73987, prepared by FIAT personnel in Germany.

PB L 85644. LEIBITZ-PIWNICKE. Preparation of mercaptoacetic acid and its addition to olefines. Nov 1943. 6 p. Price: Microfilm-$1.00 - Photostat-$1.00
Preparation of mercaptoacetic acid and its addition to olefines is described. Alkyl mercaptoacetic acids are formed from isobutylene (97 percent yield), hexene-heptene mixture (95 percent yield), hexene (97 percent yield) and diisobutylene (95.2 percent yield). The acids are esterified with thiodiglycol to produce plasticizers. In German, with an English summary. Abstract prepared at Headquarters Air Material Command, Wright Field, Dayton, Ohio.

PB L 73568. MERCK, E., CHEMISCHE FABRIK, DARMSTADT, GERMANY. Miscellaneous preparations and formulae. (FIAT Microfilm Reel Y 6, Frames 3766-3873). 1933-1945. 107 f. Price: Microfilm-$2.00 - Enlargement Print-$11.00
This microfilm reel was prepared by FIAT investigators in Germany. 48 individual items are listed below and will be available as enlargement prints. The entire reel may be obtained as a microfilm for $2.00. Please include PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
3766 PB L 73568	Preparation of crystallized zinc phenolsulfonate. By Hefen. Feb 1, 1945. In German.	$1.50
3767 PB L 73568	Preparation of zinc potassium cyanate, technical. By Hefen. Mar 25, 1944. In German.	1.50
3768 PB L 73568	Preparation of 10% iron. Saccharated peroxide of iron, dissolved, 10% iron. By Hefen. Feb 1, 1945. In German.	1.50
3769 PB L 73568	Preparation of technical ammonium dichromate and pure crystallized ammonium dichromate. n.d. In German.	1.50
3770 PB L 73568	Preparation of sodium chromate. Aug 29, 1934. In German.	1.50
3771-3772 PB L 73568	Preparation of aluminum oxide (fibrous alumina). By Wallstein Aug 1939. In German.	1.50
3773 PB L 73568	Preparation of magnesium oxide. By Wallstein Jan 17, 1945. In German.	1.50
3774-3779 PB L 73568	Examinations of crude materials and intermediate products in the preparation of magnesium carbonate for analysis, magnesium oxide for analysis and magnesium oxide for analysis free from sulfate. By Wallstein. Nov 20, 1936. In German.	1.50
3780-3782 PB L 73568	Preparation of purified powdered magnesium acetate. May 13, 1940. In German.	1.50
3783-3784 PB L 73568	Preparation of purest mercury. By Hefen. Feb 1, 1945. In German.	1.50
3785-3786 PB L 73568	Preparation of pure metallic mercury. n.d. In German.	1.50
3787 PB L 73568	Preparation of mercury from residues. By Hefen. Feb 1, 1945. In German.	1.50
3788-3790 PB L 73568	Preparation of yellow mercury oxide. By Hefen. Feb 1, 1945. In German.	1.50
3791-3792 PB L 73568	Preparation of powdery pure copper oxide and powdery copper oxide for analysis. Aug 30, 1939. In German.	1.50
3793 PB L 73568	Preparation of heavy granulated cupric oxide. Aug 14, 1940. In German.	1.50
3794-3795 PB L 73568	Preparation of cobalt oxide for analysis. By Wallstein. Jan 17, 1945. In German.	1.50
3796-3797 PB L 73568	Instructions for the preparation of cobalt hydroxide free of nickel. Feb 17, 1937. In German.	1.50
3798 PB L 73568	Preparation of cobalt hydroxide free of nickel. Jun 7, 1940. In German.	1.50
3799 PB L 73568	Preparation of cobalt oxalate. Jun 7, 1940. In German.	1.50
3800-3802 PB L 73568	Preparation of cobalt compounds free of nickel. Feb 17, 1937. In German.	1.50
3803 PB L 73568	Preparation of cobaltous cobaltic cyanide. Jun 7, 1940. In German.	1.50
3804 PB L 73568	Preparation of phenolsulfonic acid. By Hefen. Feb 1, 1945. In German.	1.50
3805 PB L 73568	Preparation of tartaric acid for analysis. Jun 18, 1940. In German.	1.50

3806 PB L 73568 — Preparation of pyrocatechol bisublimate. n.d. In German. 1.50

3807 PB L 73568 — Crystallized pyrocatechol. n.d. In German. 1.50

3808-3809 PB L 73568 — Soda lime. Oct 18, 1937. In German. 1.50

3810 PB L 73568 — Preparation of "Cyanotypin". Feb 9, 1938. In German. 1.50

3811 PB L 73568 — Process for purifying captured French pyrogallol. n.d. In German. 1.50

3812 PB L 73568 — Preparation of crude pyrogallol. n.d. In German. 1.50

3813 PB L 73568 — Preparation of purified pyrogallol. n.d. In German. 1.50

3814 PB L 73568 — Preparation of crystallized pyrogallol. n.d. In German. 1.50

3815 PB L 73568 — Preparation of bisublimated pyrogallol. n.d. In German. 1.50

3816-3820 PB L 73568 — Preparation of a 10-15% aqueous titanium trichloride solution for scientific purposes. By Horn. Sep 22, 1938. In German. 1.50

3821 PB L 73568 — Preparation of the Devarda alloy for analysis. By Hefen. Feb 1, 1945. In German. 1.50

3822-3823 PB L 73568 — Frames cancelled.

3824-3832 PB L 73568 — Preparation of "Cuprex". By Seidel. Mar 5, 1942 - Feb 1, 1944. In German. 1.50

3833 PB L 73568 — Preparation of pure powdery sodium salt of oleic acid for medical purposes. By Hefen Feb 1, 1945. In German. 1.50

3834 PB L 73568 — Preparation of arsenic spray substances. Dec 18, 1933. In German. 1.50

3835 PB L 73568 — Process for dissolving arsenic in the preparation of plant protectives. By Peters. Feb 1, 1938. In German. 1.50

3836-3842 PB L 73568 — Production of "Cusisa". (A dry spraying substance for combatting peronospora). By Jung. Oct 24, 1945. In German. 1.50

3843-3848 PB L 73568 — Production of "Detal" - winter spraying substance "Merck", D.R.P. 753 196 of Jan 31, 1941. By Jung. Jan 29, 1946. In German. 1.50

3849-3850 PB L 73568 — Modification to the manufacturing process of "Eisturnit" - base material with 60% tertiary calcium arsenate. By Peters. Dec 9, 1938. In German. 1.50

3851-3857 PB L 73568 — Preparation of calcium arsenate "Merck" with about 25% arsenic for combatting potato beetles. By Jung. Feb 2, 1946. In German. 1.50

3858-3873 PB L 73568 — Drawings on the preparation of ascorbic acid. By Wenz and Göbel. Jan 6, 1940 - Jun 22, 1942. In German. 2.00

PB L 73568-S. MERCK, E., CHEMISCHE FABRIK, DARMSTADT, GERMANY. Miscellaneous preparations and formulae. (FIAT Microfilm Reel Y 6, Frames 3766-3873, abstract cards). 1933-1946. 48 p. Price: Microfilm-$1.00 - Photostat-$4.80
These are abstract cards of the individual items on the above FIAT microfilm reel Y 6, PB 73568, prepared by FIAT personnel in Germany.

PB L 73959. MIKOCKI, EDWIN. German regulations on compressed gases. (FIAT Microfilm Reel AA 228, Frames 1-100) 1942. 100 f. Price: Microfilm-$1.75 - Enlargement print-$10.00
The film contains the regulations for movable closed containers for storing compressed or liquefied gases. The regulations consist of the introductory decrees, the police regulations, the technical principles and the regulation of fees valid for Germany. In German.

PB L 87467. MURPHY, C. G. Strippable protective spray coating. (Parlin laboratory report No. 900, Navy Research Contract NOrd-5216). Jul 1944. 36 p. Price: Microfilm-$1.75 - Photostat-$4.00
To provide a sprayable strippable film for use in protecting military and naval equipment from corrosion. This report covers the results of six months work to develop such a product in which the detailed experimental results and conclusions are given together with charts and graphs.

PB L 87468. MURPHY, C. G. Strippable protective spray coatings. (Parlin laboratory report No. 906, Navy Research Contract NOrd-5216). Jun 1945. 26 p. Price: Microfilm-$1.50 - Photostat-$3.00
This report covers the results of the experimental work under the subject research contract for the period July 1, 1944 to June 30, 1945. It supplements Report No. 900 (PB 87467, appearing in this Bibliography). The results covered are along the following lines: (1) field testing of the ethyl cellulose, nitrocellulose and neoprene type coatings, (2) general evaluation of the "Vinylite" resins for use in strippable sprayable coatins, (3) improvement in the durability of NOL-193 lacquer meeting specification QS-3602, (4) development of adhesives to adhere vinyl and neoprene type strippable coating to steel, (5) evaluation of the ingredients used in formulating NOL-193 stripping lacquer, and (6) development of a dipping type vinyl stripping lacquer. Experimental data, results, and conclusions are given together with charts and photographs.

PB L 87469. MURPHY, C. G. Strippable protective spray coatings. (Parlin laboratory report No. 914, Navy Research Contract NOrd-5216) Jan 1946. 16 p. Price: Microfilm-$1.25 - Photostat-$2.00
This report covers the experimental work done under the subject research contract for the period July 1, 1945 to December 31, 1945. It supplements Parlin Laboratory reports No. 900 and 906 (PB 87467 and 87468). The final phase of the work as recorded in this report covers (1) surveillance tests of exposure series on the various formulations developed and of the NOLSS-193 lacquer and (2) a study of the gelatin characteristics of the NOLSS-193 formulation. Experimental data, results, and conclusions are given together with charts.

PB L 70219. RUHRCHEMIE A.G., OBERHAUSEN, GERMANY. Reports relating to fuels and organic preparations. (FIAT Microfilm Reel K-31, Frames 8203-8472). 1938-1945. 270 f. Price: Microfilm-$3.50 - Enlargement Print-$27.00.
This reel was prepared by FIAT investigators in Germany. 35 individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $3.50. Please include PB and frame numbers when ordering individual items. In German. Frame numbers for the most part are illegible.

751195 O 48——6—39

Miscellaneous Chemicals (contd)

Frames	Title	Price
8203 - 8306 PB L 70219	Pressure synthesis of hydrocarbons. By Herbert. n.d. In German. These frames have been treated on Frame 8202, Reel K30, PB 73587.	$1.50
8207 - 8211 PB L 70219	Pressure synthesis of hydrocarbons; circulation with dilute catalysts. By Herbert. Feb 2, 1938. In German.	1.50
8212 - 8219 PB L 70219	Experiments for the pressure synthesis of hydrocarbons with alloy skeleton catalysts containing copper and iron catalysts. By Herbert. Jan 26, 1938. In German.	1.50
8220 - 8229 PB L 70219	Isosynthesis. By Roelen and Velde. Jun 17, 1943 and Aug 14, 1945. In German.	1.50
8230 - 8236 PB L 70219	Installation of an electric dust remover. By Heweling. Jun 26, 1941. In German.	1.50
8237 - 8249 PB L 70219	Absorption of organic sulfur compounds by preliminary purifying substances. By Krueger. Sep 17, 1943. In German.	1.50
8250 - 8256 PB L 70219	Finest purification of synthesis gas with active carbon. By Feist. Jun 19, 1939. In German.	1.50
8257 - 8264 PB L 70219	Processing synthesis products to lubricating oil. Jun 14, 1944. In German.	1.50
8265 - 8269 PB L 70219	Development work of recent years. Jun 20, 1940. In German.	1.50
8270 - 8275 PB L 70219	Addition of circulating gas in the gasoline synthesis. By Schuff. Nov 23, 1939. In German.	1.50
8276 - 8283 PB L 70219	Operation of the pressure synthesis. By Schuff. Dec 21, 1938. In German.	1.50
8284 - 8306 PB L 70219	Separation of the primary products of the normal-pressure synthesis into groups of hydrocarbons. Jul 15, 1938. In German.	2.50
8307 - 8308 PB L 70219	Production of 2,2-dimethylbutanol. Sep 16, 1944. In German.	1.50
8309 - 8316 PB L 70219	Production of alcohols by synthesis. By Velde. Dec 28, 1943. In German.	1.50
8317 - 8319 PB L 70219	Recovery of alcohols from the waste water of the synthesis. By Velde. Nov 4, 1943. In German.	1.50
8320 - 8322 PB L 70219	Production of alcohol from primary products of the gasoline synthesis by means of calcium chloride. By Fritsche. Sept 25, 1941. In German.	1.50
8323 PB L 70219	Fatty alcohols. Sep 3, 1941. In German.	1.50
8324 - 8325 PB L 70219	Alcohol synthesis. By Roelen. Apr 16, 1940. In German.	1.50
8326 - 8327 PB L 70219	Production of higher alcohols and development of a new paraffin synthesis. By Heckel. Nov 28, 1939. In German.	1.50
8328 - 8329 PB L 70219	Determination of alcohols from the synthesis. By Roelen. Nov 24, 1939. In German.	1.50
8330 - 8331 PB L 70219	Higher alcohols. By Roelen. Sep 16, 1939. In German.	1.50
8332 - 8336 PB L 70219	Alcohol synthesis. By Tramm. Jun 2, 1939. In German.	1.50
8337 - 8375 PB L 70219	Production of alcohols of the C_3 and C_4 fraction from Gasol. By Spiske. Feb. 15, 1939. In German.	4.00
8376 - 8383 PB L 70219	High-grade diesel fuels for diesel motor-cars. Nov 18, 1939. In German.	1.50
8384 - 8390 PB L 70219	The supply of diesel fuels. Oct 23, 1939. In German.	1.50
8391 - 8399 PB L 70219	Measures for increasing diesel oil production. Aug 7, 1939. In German.	1.50
8400 - 8402 A PB L 70219	Production of "Toka" alumina catalyst. By Spiske. Jan 10, 1944. In German.	1.50
8403 - 8406 PB L 70219	Aromatization of a C7 fraction. Oct 2, 1943. In German.	1.50
8407 - 8416 PB L 70219	Analytical methods for testing the products of the oxo-process, (i.e. the process for the oxidation of paraffins). By Wurzschmitt. Dec 7, 1942. In German.	1.50
8417 - 8419 PB L 70219	Determination of hydrocarbons in fatty alcohols. Aug 18, 1942. In German.	1.50
8420 - 8423 PB L 70219	Oxo synthesis. Jan 3, 1945. In German.	1.50
8424 - 8431 PB L 70219	Influence of the coke granulation on output and consumption. Oct 30, 1941. In German.	1.50
8432 - 8442 PB L 70219	Experiments on gasification under pressure. Sep 5, 1939. In German.	1.50
8443 - 8465 PB L 70219	Production of synthesis gas from coke or coal. By Kelting. Nov 22, 1938. In German.	2.50
8466 - 8472 PB L 70219	Experiments on the carbon monoxide hydrogenation under normal pressure in presence of acetylene. Mar 20, 1941. In German.	1.50

PB L 70219-S. RUHRCHEMIE A.G., OBERHAUSEN, GERMANY. Reports relating to fuels and organic preparations. (FIAT Microfilm Reel K-31, Frames 8203-8472, abstract cards). 1938 - 1945. 35 p. Price: Microfilm-$1.00 - Photostat-$3.00.
Brief abstracts of the individual items on the above reel K 31, PB 70219, prepared by FIAT personnel in Germany.

PB L 85656. SCHÖLLIG, ALFRED. Butadiene. Sep 1942. 6 p. Price: Microfilm-$1.00 - Photostat-$1.00
Report discusses: efficiency of a coke catalyst as compared with graphite; experiments with a catalyst containing an addition of palladium to determine the effect of hydrogen in the butadiene formation from butanediol; experiments on butadiene preparation by way of acetals. In German. Abstract prepared at Headquarters Air Materiel Command, Wright Field, Dayton, Ohio.

PB L 85643. SCHOELLIG. Compounds formed during preparation of butadiene. (Monthly report) Nov 1943. 14 p. Price: Microfilm-$1.25 - Photostat-$2.00
Experiments deal with crotonaldehyde formed during the 1.3 butyleneglycol dehydrating process. Separation of crotonaldehyde from cyclic unsaturated ethers is described. Other topics are absorption of oils contained in crude butadiene, catalytic dehydration of allyl carbinol in presence of hydrogen, constitution of cyclic ethers. In German. Abstract prepared at Headquarters Air Materiel Command, Wright Field, Dayton, Ohio.

PB L 85633. SCHOELLIG. Experiments relating to butadiene production. Monthly report. Sep 1943. 8 p. Price: Microfilm-$1.00 - Photostat-$1.00
Report discusses experiments relating to: absorption of butadiene and propylene by active charcoal; separation of butadiene and butylene by selective absorption by means of active charcoal; dehydration of allyl carbinol in the presence of hydrogen; dehydration of butylene glycol by basic catalysts; and investigation of byproducts of butadiene production. In German, with an English summary. Abstract prepared at Headquarters Air Materiel Command, Wright Field, Dayton, Ohio.

PB L 73851. SCHWAB, G. M. (editor). Handbook of catalysis. (FIAT Microfilm Reel B 33a, Frames not numbered) 1941-1943. 899 f. Price: Microfilm-$6.00 - Enlargement print-$90.00
Three volumes of the manual are reproduced on this reel. They are, in order: Heterogeneous catalysis, 3rd part, Vienna 1943, constituting volume 6 of the complete work (670 pages); General and gas catalysis, Vienna 1941 - volume 1 (507 pages); and Biocatalysis, Vienna 1941, volume 3 of the entire series (624 pages). An outline of the contents of these volumes will be found in PB L 73851-S (see below). Since the frames have not been numbered and the page numbers start with 1 in each volume, it will not be possible to order individual parts of this reel. Only the entire reel may be obtained either as microfilm or enlargement prints. In German.

PB L 73851-S. SCHWAB, G. M. (editor). Handbook of catalysis. (FIAT Microfilm Reel B 33a, Frames not numbered, abstract cards) 1941-1943. 6 p. Price: Microfilm-$1.00 - Photostat-$1.00
These are short abstracts of the three volumes on catalysis which are reproduced on reel B 33a (PB L 73851), described above. These abstracts were prepared by FIAT personnel in Germany. In English.

PB L 2423-S. SEGUR, J. B. Special report on the examination of glycerogen. (Supplement to report by M. L. Sheely, Glycerogen, a substitute for glycerine, PB 2423). Feb 1947. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00
A report by the Miner Laboratories, Chicago, Illinois on the physical properties, solubility, and distillation factors with recommendations concerning its use in the United States. Supplement to PB 2423; v. 1, p. 105, this Bibliography.

PB L 27835. STADLER. Reducing the inflammability of oleins in the oiling of wool. (I. G. Farbenindustrie, Main Laboratory Report) (Frames 5957-5971 of FIAT Microfilm Reel 4 B) Sep 1928. 8 f. Price: Microfilm-$1.00 - Enlargement print-$1.50
In German.

PB L 73843. WACKER, ALEXANDER, G.M.B.H., MUNICH, GERMANY. Monthly laboratory reports. (FIAT Microfilm Reel G 143, Frames 4899-5530) 1927-1929. 631 f. Price: Microfilm-$6.00 - Enlargement print-$63.50
This reel contains, in chronological order, the monthly reports, December 1927 to May 1929, of the laboratory of the firm Dr. Alexander Wacker in Burghausen. Each report is entitled "Laboratoriums monatsbericht" and date. Each report deals with various subjects, statistical data of the work performed during the month in question, analyses carried out, and progress in research. The latter concerns chiefly organic compounds, particularly "Zolose." The entire reel is not very legible and may reproduce poorly. In German.

PB L 27822. TREPPENHAUER. The pyrogenic cracking of cyclohexane. (I. G. Farbenindustrie, Main Laboratory Report) (Frames 5715-57-? of FIAT Microfilm Reel 4 B) Jun 1928. 2 f. Price: Microfilm-$1.00 - Enlargement print-$1.50
In German.

PB L 73684. VIENNA, AUSTRIA, UNIVERSITY. Pharmacology, pharmacognosy, physiological, biological and analytical chemistry. (FIAT Microfilm Reel Q4, Frames 3031-4000. 1939-1943. 940 f. Price: microfilm-$6.00 - Enlargement Print-$97.00.
This microfilm, prepared by FIAT personnel in Germany contains a collection of 30 theses in manuscript as listed below. Some of the works are undated but are probably contemporary. The individual titles will be available as enlargement prints. The entire reel is available as a microfilm for $6.00, or as enlargement prints for $97.00. When ordering individual items as enlargement prints please include this PB number when the frame numbers. In German.

Frames	Title	Price
3031 - 3045 PB L 73684	The coumarin content of various drugs. By Josef Matzke. May 1939. In German.	$1.50
3046 - 3096 PB L 73684	Coumarin from Seseli indicum: the composition of Seselin. By Josef Matzke. May 1939. In German.	5.50
3097 - 3134 PB L 73684	Constitution and synthesis of methoxybenzenetricarboxylic acids. By Josef Matzke. May 1939. In German.	4.00
3135 - 3158 PB L 73684	Constitution and synthesis of methoxyphthalides. By Josef Matzke. May 1939. In German.	2.50
3159 - 3180 PB L 73684	Preparation of condensation products of tetramethoxydesoxybenzoin and aminoacetal. By Lucia Raschik. 1945. In German.	2.50
3181 - 3197 PB L 73684	Dimeric formylisobutyraldol and its condensation products similar to tetraldane. By Lucia Raschik. 1945. In German.	2.00
3198 - 3326 PB L 73684	The behavior of the carotenoids ascorbic acid, and chlorophyll in etiolated wheat germs. By Erika Srb. Mar 30, 1940. In German.	13.00
3327 - 3425 PB L 73684	Tests of the purine content of various organs. By Alois Pehan. Mar 29, 1939. In German.	10.00
3426 - 3461 PB L 73684	The occurrence of substituted coumarones in beech tar and their relationship to lignin. By Erich Nittner. Jan 2, 1940. In German.	4.00
3462 - 3503 PB L 73684	Macro-and microanalytical determination of selenium and tellurium (as well as some separation methods). By Leopold John. Mar 18, 1940. In German.	4.50

Miscellaneous Chemicals (contd)

3504 - 3513 PB L 73684 **The analytic behavior of the phenylmercury salts.** By Richard Seboth. May 1939. In German. 1.50

3514 - 3564 PB L 73684 **Data on microanalysis.** By Richard Seboth. May 1939. In German. 5.50

3565 - 3617 PB L 73684 **The bitter substance of the Fertucaria amara.** By Maria Krumpfhofer-Riedl. June 1939. In German. 5.50

3618 - 3655 PB L 73684 **Equol synthesis.** By Franz Prillinger. May 1939. In German. 4.00

3656 - 3672 PB L 73684 **The hydrogenation of chromone derivatives.** By Franz Prillinger. May 1939. In German. 2.00

3673 - 3714 PB L 73684 **The specificity of synthetic estrogenic hormones.** By Franz Prillinger. May 1939. In German. 4.50

3715 - 3726 PB L 73684 **The bitter substance of the calumba root.** By Franz Prillinger. May 1939. In German. 1.50

3727 - 3740 PB L 73684 **The racemization of "nicotin dijodomethylat".** By Getrude Bobenberger. n.d. In German. 1.50

3741 - 4754 PB L 73684 **The synthesis of codamine.** By Gertrude Bobenberger. n.d. In German. 1.50

3755 - 3791 PB L 73684 **An ingredient of Ammi visnaga (L.) Lam: "Kellakton," a coumarin.** By Oskar Matzke. Apr 1945. In German. 4.00

3792 - 3820 PB L 73684 **The reduction of lactams.** By Reika Sterm. n.d. In German. 3.00

3821 - 3835 PB L 73684 **Syntheses of pyrrolizidine.** By Annemarie Reichard. n.d. In German. 1.50

3836 - 3848 PB L 73684 **The separation of hydrogen bromide from cholesterol dibromide.** By Annemarie Reichard. n.d. In German. 1.50

3849 - 3873 PB L 73684 **The constitution of dimeric glycolaldehydes.** By Luzia Raschik. 1944. In German. 2.50

3874 - 3885 PB L 73684 **Aldomanes with a ketone component.** By Luzia Raschik. 1944. In German. 1.50

3886 - 3911 PB L 73684 **Triethylene diamine.** n. d. In German. 3.00

3912 - 3924 PB L 73684 **The conductivity of some electrolytes in anhydrous hydrocyanic acid.** By Jarl Berga. Jul 29, 1942. In German. 1.50

3925 - 3936 PB L 73684 **The molecular weight of polymers.** By Hedwig Schneider. n.d. In German. 1.50

3937 - 3972 PB L 73684 **Synthesis of pinosylvin.** By Fritz Liebherr. Apr 1941. In German. 4.00

3973 - 4000 PB L 73684 **Photo polymerization of trans-dichloroethylene.** By Christiane Eichinger. Dec 1942. In German. 3.00

PB L 73684-S. VIENNA, AUSTRIA, UNIVERSITY. **Pharmacology, pharmacognosy, physiological, biological and analytical chemistry.** (FIAT Microfilm Reel Q4, Frame 3031-4000, abstract cards.). 1939-1945. 47 p. Price: Microfilm-$1.00 - Photostat-$4.00.
These are abstract cards for the items on the above FIAT microfilm reel, Q 4, PB 73864, prepared by FIAT personnel in Germany.

MACHINERY (EXCEPT ELECTRICAL)

*PB L 87379. BOWEN, W. G. and others. **Wartime development in the design of pumps, vacuum pumps, compressors, steam traps.** (BIOS Final Rept 1582, Item 31). Sep 1947. 12 p. Price: Microfilm-$1.25 - Photostat-$2.00
This report is based upon investigations and inquiries during a tour of the British and American zones, particularly in connection with the firm of Klein, Schanzlin & Becker, A. G. and their associated firms. "There appear to have been no developments at all during the war in the manufacture of any of the products which were made by the firm in pre-war days."

PB L 81320. COMBINED INTELLIGENCE OBJECTIVES SUB-COMMITTEE. **Interrogation of Professor Vieweg, ex Darmstadt, May 9, 1946.** (CIOS ARCO Rept 304). May 1945. 2 p. Price: Microfilm-$1.00 - Photostat-$1.00
Professor Vieweg's particular science was that of precision measurements. Early in the war his attention was turned to the problem of the lubrication of small bearings, in particular the problem of friction in small ball bearings. He succeeded in designing an automatic torque measuring machine. This would measure torques down to 1/10th of a milligram/centimeter. Experiments were carried out with ball races including some with a total diameter over the outer race of 1 millimeter. The ball bearings used in this race were all 17 millimeter diameter.

PB L 86415. EISENWERK WÜLFEL, HANNOVER-WÜLFEL, GERMANY. **Wulfel belt drives, elastic short drives.** Liste 752. n. d. 29 p. Price: Microfilm-$1.50 - Photostat-$3.00
This pamphlet describes the uses and transmission of energy by the use of rubber-fabric V-belts. Various tables giving sizes and other information are included. Illustrated. In German.

PB L 86414. FLENDER, A. FRIEDR., & CO., BOCHOLT, GERMANY. **Variator, patented in Germany: Drive for step-less regulation of the number of revolutions.** n. d. 55 p. Price: Microfilm-$2.25 - Photostat-$5.00
The pamphlet describes the "Variator," a speed reducer that is capable of variable regulation of the speed of motor driven machines. Various installations of these speed reducers are included, together with drawings of arrangements of motor and reducer. In German.

* PB L 87390. GREER, H. L. and KENDALL, R. **Aerial ropeways association.** (BIOS Final Rept 965, Item 19). n. d. 41 p. Price: Microfilm-$2.00 - Photostat-$5.00
Six companies were investigated concerning passenger ropeways. That of Ernst Heckel G.m.b.H., Saarbrucken, contains the greatest detail with references to an attached German article. That of J. Pohlig A. G., Koln-Zollstock, contains a detailed description of Guilini Cableway. The other 4 have very little information.

* PB L 87365. GREGG, R. J. and HOOPER, C.J.W. German gas appliance industry. (BIOS Final Rept 1591, Item 30). Dec 1947. 34 p. Price: Microfilm-$1.75 - Photostat-$4.00
The report deals with design, development, and general experience with instantaneous gas water heaters, and gas appliance production. The technical information secured forms the main body of the report. Certain information provided was secured from the dual source of Dessa G.m.b.H. and the Gasinstitut der Technischen Hochschule of Karlsruhe.

PB L 70361. I. G. FARBENINDUSTRIE A. G., HÖCHST, GERMANY. Reports on the preparation of intermediates and inorganic chemicals. Machine shop pamphlets. (FIAT Microfilm Reel C 40, Frames 6344-7292) 1929-1946. 949 f. Price: Microfilm-$6.00 - Enlargement print-$95.00
A number of items dealing with machine shop practice, machine shop standards, welding, etc., are contained in FIAT Microfilm Reel C 40, PB L 70361, found in this Bibliography under "Chemicals and Allied Products - Miscellaneous Chemicals."

* PB L 85170. KRAFT, E. A. High pressure steam turbines. Vol. II - Plates. (FIAT Final Rept 1149). n. d. 99 p. Price: Mimeo-$2.50
This report consists of plates (graphs, drawings, diagrams, and photographs) illustrating vol. I of "High Pressure Steam Turbines" which is PB L 85169; v. 8, p. 327, this Bibliography.

PB L 86192. LUTZ, OTTO. High pressure combustion chambers for gas turbines. (CONLAN Rept 68). n. d. 72 p. Price: Microfilm-$2.75 - Photostat-$8.00
This is an English translation of PB 23310, vol. 3, p. 406.

PB L 78267-82. MAJER, CHRISTIAN, MASCHINENBAU, TÜBINGEN, GERMANY. Automatic winding and grinding machines. (Supplement to Manufacture of paper tubes, bobbins and cones in Germany, by Frank M. Steadman and others, PB 78267) n. d. 4 p. Price: Microfilm-$1.00 - Photostat-$1.00
This material consists of four bulletins illustrating and describing the following four machines: (1) an automatic, one spindle universal winding machine for the production of cylindrical paper-tubes, text in English; (2) automatic double spindle winding machine with text in English; (3) an automatic paper-roll grinding machine with text in English; and (4) an automatic single spindle rolling machine for production of conical and cylindrical paper shells with text in German. All machines manufactured by Chr. Majer Maschinenbau, Tübingen, Germany.

PB L 86405. RAMESOHL & SCHMIDT A. G., OELDE, GERMANY. The new Westfalia no-foam construction. n. d. 4 p. Price: Microfilm-$1.00 - Photostat-$1.00
A leaflet describing the design of a new type of centrifugal separator. In German.

PB L 86399. RAMESOHL & SCHMIDT A. G., OELDE, GERMANY. Westfalia clarifier-separator. Sep 1945. 2 p. Price: Microfilm-$1.00 - Photostat-$1.00
This is a cross-section drawing of a centrifuge with arrows showing the direction of flow of liquid.

PB L 86403. RAMESOHL & SCHMIDT A. G., OELDE, GERMANY. Westfalia cream separator no-foam type MDE. Aug 1937. 4 p. Price: Microfilm-$1.00 - Photostat-$1.00
This brochure describes and illustrates the subject centrifuge. In English.

PB L 86402. RAMESOHL & SCHMIDT A. G., OELDE, GERMANY. Westfalia cream separator power-driven model MC 300/750; model MC 304/754. Feb 1936. 6 p. Price: Microfilm-$1.00 - Photostat-$1.00
A brochure illustrating the subject centrifugal separators. In English.

PB L 86400. RAMESOHL & SCHMIDT A. G., OELDE, GERMANY. "Westfalia" industrial separators. n. d. 4 p. Price: Microfilm-$1.00 - Photostat-$1.00
This is a folder illustrating the line of centrifuges made by the subject company bearing the brand name "Westfalia."

PB L 86406. RAMESOHL & SCHMIDT A. G., OELDE, GERMANY. Westfalia milking machine. Oct 1938. 26 p. Price: Microfilm-$1.50 - Photostat-$3.00
This pamphlet illustrates and explains the operation of Westfalia one and two cow milking machines and the vacuum pumps necessary for their operation. In German.

PB L 86404. RAMESOHL & SCHMIDT A. G., OELDE, GERMANY. Westfalia yeast-molasses separators. Oct 1938. 32 p. Price: Microfilm-$1.75 - Photostat-$4.00
This industry catalog describes centrifugal separators that are both belt and motor driven. In German.

PB L 86410. HERMKLWERK A. G., TUBINGEN, GERMANY. Our production programme. n. d. 7 p. Price: Microfilm-$1.00 - Photostat-$1.00
This is a brochure describing, in English, French, Italian and Spanish, the products of the subject company. These products include electrical drives, gear drives, grinders and polishers and welding sets.

PB L 86228. SANDERSON, W. M. Hydraulic mechanisms for fire control. Final report, Feb 28, 1942. (NDRC D-2 Rept 41). Feb 1942. 22 p. Price: Microfilm-$1.50 - Photostat-$3.00
The United Shoe Machinery Corporation had conducted studies and experimental investigations in connection with hydraulic mechanisms for fire control. This final report presents a summary of the findings and conclusions resulting from this work. Four photographs and three sketches are included.

* PB L 87372. STEWART, JOHN and others. German provender milling and seed cleaning. (BIOS Final Rept 1553, Item 22, 31). Sep 1947. 25 p. Price: Microfilm-$1.50 - Photostat-$3.00
This report comprises 15 investigations of mills producing mostly products for human consumption or makers of milling machinery. It states." ..., and although our visit proved extremely interesting it was rather disappointing so far as provender milling and seed cleaning machinery was concerned."

PB L 86412. THOMA-DEMAG-GETRIEBE, DUISBURG, GERMANY. Hydraulic drives made by Thoma-Demag-Drives for heavy duty. n. d. 10 p. Price: Microfilm-$1.00 - Photostat-$1.00

Machinery (contd)

This is a pamphlet describing the hydraulic drives manufactured by Demag A.G., Duisburg. These are large drives for rolling mills, large machine tools and ships or anywhere that regulation of the direction and number of revolutions are vital. In German.

PB L 80864. ULTRA-PRÄZISIONSWERK G.M.B.H., ASCHAFFENBURG, GERMANY. Projection profile grinder PFS 3. n. d. 7 p. Price: Microfilm-$1.00 - Photostat-$1.00
A folder containing the description of the PFS 3 profiler, its scope of operations, and principal technical data. In German.

PB L 81750. VDI FACHAUSSCHUSS FÜR REGELUNGSTECHNIK, BERLIN. Regulator technique: Concepts and nomenclature. 1944. 68 p. Price: Microfilm-$2.50 - Photostat-$7.00
Booklet issued by the committee on regulator and control technique of the VDI (German Engineers Association) to serve as a basis for German industrial standards "DIN" for this type of equipment. It contains definitions of technical terms, a discussion of functions performed by regulator and control equipment and establishes a classification for various kinds of control equipment according to the method of operation. In German.

PB L 86781. VDI - VERLAG G.M.B.H., BERLIN. Maintenance of milling cutters. 1942. 45 p. Price: Microfilm-$2.00 - Photostat-$5.00
This illustrated manual presents practical hints for the care and maintenance of milling cutters. In German.

PB L 86398. WALTHER & CIE. A. G., COLOGNE, GERMANY. Walther: Coal dust furnaces, high pressure boilers, vertical tube boilers, divided chamber boilers. n. d. 72 p. Price: Microfilm-$2.75 - Photostat-$8.00
This PB consists of four brochures describing and illustrating the named types of boilers manufactured by Walther & Cie, A. G. In German.

*PB L 73440-6. WALZ, MAX A. Bosch fuel injection system. (FIAT Tech Bulletin T-2). Mar 1947. 1 p. Price: Mimeo-$0.25
A complete set of drawings was obtained of the Bosch Fuel Pump PE 4A60, and nozzle DN12 SD12, as used on the Daimler-Benz, 4-Cylinder Diesel Engine "OM138." FIAT microfilm No. 237-4A, PB 73440, vol. 6, p. 208, this Bibliography, contains drawings of eight subassemblies, with complete breakdown of each, as well as the reproduction of the following two booklets by Robert Bosch on automotive equipment: "Ausrüstung für Kraftwagen," and "Ausrüstung für Schwer@lmotoren." The completeness of the data shown on this microfilm should enable anyone familiar with this class of product to manufacture such equipment without spending any costly engineering and design time.

PB L 85188. WETMANN, W. Loss repartition of a carburetor-type car engine. (Ger. Institute for Internal Combustion Engines Rept 34). Aug 1946. 139 p. Price: Mimeo-$3.50
This is report No. 34 on research carried out by the Institute for Internal Combustion Engines during the last years of the war. This report outlines the most useful way of investigating and evaluating the losses in a carburetor-type car engine. 67 diagrams are included. For a general survey of 42 research reports by this institute, see PB 85129, vol. 7, p. 1167, this Bibliography.

MEDICAL RESEARCH AND PRACTICE, INCLUDING CLINICAL APPLICATION OF DRUGS AND PHARMACEUTICALS

PB M 73398. DÜSSELDORF, GERMANY, ACADEMY OF MEDICINE. A collection of doctor's theses. (FIAT Microfilm Reel M 93, Frames 4783-5608). 1939 - 1947. 825 f. Price: Microfilm-$6.00 - Enlargement Print-$82.50.
The 20 individual items of this FIAT microfilm reel are listed below. They will be available as enlargement prints. Please give PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
4783 - 4804 PB M 73398	Quintan fever. By Paul Becker. n.d. In German.	$2.50
4805 - 4830 PB M 73398	A case of cerebral thromboangiitis obliterans. By Hermann Bekuhrs. 1942. In German.	3.00
4831 - 4871 PB M 73398	Clinical and technologic experiments on the root canal treatment after resection of the root apex. By Werner Bussmann. n.d. In German.	4.50
4872 - 4936 PB M 73398	Diseases of the internal carotid artery. By Karl Anton Buening. n.d. In German.	6.50
4937 - 4999 PB M 73398	Comparative study on the pharmacological effect of helenin and santonin on isolated frog hearts. By Rudolf Buchholz. 1939. In German.	6.50
5000 - 5023 PB M 73398	The dangers of local pharyngeal application of cocaine, novocaine and pantocaine. By Mirbach. n.d. In German.	2.50
5024 - 5046 PB M 73398	Injuries of face and jaws in the front-line and in the home country. By Maria Meyers. n.d. In German.	2.50
5047 - 5101 PB M 73398	Contribution to the problem of the central nervous regulation of the blood pattern. By Werner Gormann. 1944. In German.	5.50
5102 - 5128 PB M 73398	A case of traumatic edema of the hand. By Johann Weiss. n.d. In German.	3.00
5129 - 5155 5527 - 5553 PB M 73398	Utilization of d,l - tyrosine in healthy children and those diseased with acute rheumatic arthritic. By Therese Junker-Simon. n.d. In German.	5.50
5156 - 5183 PB M 73398	Accusations by anesthetized and hypnotized persons. By Max Seidemann. 1944. In German.	3.00
5184 - 5241 PB M 73398	History of medical opinion on "ileus". By Heribert Morrkamp. 1940. In German.	6.00
5242 - 5274 PB M 73398	The hormonal genesis of the milk-like secretion in new born children ("Hexen milch"). By Friedrich Marx. 1944. In German.	3.50
5275 - 5336 PB M 73398	Conditions with regard to the drinking water in Wesel and Xanten, and its sanitary evaluation. By Oswald Cornelissen. 1944. In German.	6.50

5337 - 5395 PB M 73398 — Functions of the muscles, other than physical. By Heinz Lefringhausen. 1944. In German. 6.00

5396 - 5413 PB M 73398 — Discussion of a case of deformation of the vertebral column as a contribution to its differential diagnosis. By Josef Gilberg. 1939. In German. 4.00

5414 - 5447 PB M 73398 — Fatal intracranial hemorrhage from an angioendothelioma of the pedicle of the pituitary gland. By Gerda Miethe. n.d. In German. 3.50

5448 - 5526 PB M 73398 — Determination of the range of movement of the large and medium joints of the extremities during vocational work. By Wolfgang Simon. 1943. In German. 8.00

5527 - 5553 PB M 73398 — See frames 5129-5155.

5554 - 5608 PB M 73398 — Preventives against intoxication. By Hans Heinz Wipperfürth. 1943. In German. 5.50

PB M 73400. DUSSELDORF, GERMANY, ACADEMY OF MEDICINE. A collection of doctors' theses. (FIAT Microfilm Reel H 97, Frames 8189-8538). 1941-1943. 349f. Price: Microfilm-$4.25 - Enlargement Print-$35.00.
The individual items of this FIAT microfilm reel are listed below. They will be available as enlargement prints. Please give PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
8189 - 8284 PB M 73400	The cases of Feer's disease observed at Duesseldorf, children's hospital. By Irmgard Bideau. 1943. In German.	$10.00
8285 - 8332 PB M 73400	Contribution to the affections of the mandibular joint in children. By Heinrich Derstappen. 1943. In German.	5.00
8333 - 8412 PB M 73400	Prognosis of heart diseases. By Otto Schneiders. 1941. In German.	8.00
8413 - 8500 PB M 73400	Agranulocytosis and leucopenic reactions in various syndromes. By Kurt Schaefer. 1941. In German.	9.00
8501 - 8538 PB M 73400	Coincidence of malformations of diaphragm and lungs. By Hans Schuermann. 1942. In German.	4.00

PB M 74117. FEUCHTINGER, O. On the forms of lymphatic leukemia with hemolytic course. (FIAT Microfilm Reel CC 290, Frames 1-17) 1942. 17 f. Price: Microfilm-$1.00 - Enlargement print-$2.00
After an attempt to classify the hemolytic anemias, symptoms, diagnosis and pathogenesis of leukemia with hemolytic jaundice are discussed by means of an actual case. Therapeutic measures with temporary results are mentioned. In German.

PB M 74085. HEIDELBERG, GERMANY, UNIVERSITY. Two books on dentistry. (FIAT Microfilm Reel CC 277, Frames not numbered) 1943. 237 f. Price: Microfilm-$3.25 - Enlargement print-$24.00
These are two books which were filmed in the library of the above university. The title of one is "Dental work with plastics," by K. Leitske (1943). The other is entitled "The 'Palapont' in dental practice," and is by K. Sendtner (1943). Number of pages of the former is 196, of the latter 235. Both books give information to the dentist on the use of plastics in dental prosthetics. They are richly illustrated. In German.

PB M 73965. KIMMIG, J. Histamine inhibitors. (FIAT Microfilm Reel AX 157, Frames 1-10) 1946. 10 f. Price: Microfilm-$1.00 - Enlargement print-$1.50
This is a treatise informing about experiences gained with the new histamine inhibitors, "Antergane" and "Antistine," which were discovered by French scientists and which are derived from cholamine and ethylene diamine. In German.

PB M 73796. ERLANGEN, GER. UNIVERSITY. A collection of doctors' theses. (FIAT Microfilm Reel C 216, Frames 8365-9237). 1920-1939. 873 f. Price: Microfilm-$6.00 - Enlargement Print-$87.50
49 individual items of this FIAT microfilm reel are listed below. They will be available as enlargement prints. Please give PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
8365-8387 PB M 73796	Genesis of the islands of Langerhans of the pancreas. By G. Wolf. Dec 15, 1934. In German.	$3.50
8388-8404 PB M 73796	Significance of phosphoglyceric acid for liver glucose. By F.W. Zens. Nov 16, 1937. In German.	2.00
8405-8428 PB M 73796	Rectal stenoses not caused by tumors. By E. Ziegler. Apr 27, 1939. In German.	3.50
8429-8467 PB M 73796	The course of dental development in cases with orthognathous type of bite and with premature loss of teeth. By H. Zimmermann. Jun 15, 1938. In German.	4.00
8468-8478 PB M 73796	Aims and results of infant welfare. By M.B. Zimmermann. Apr 5, 1939. In German.	1.50
8479-8494 PB M 73796	Cerebral vascular syphilis and psychic disorders caused by it. By E. Bluhm. Jan 12, 1938. In German.	2.00
8495-8505 PB M 73796	The frequency of excessive formation of corpus luteum tissue in non-pregnant women. By H. Blum. Jan 15, 1938. In German.	1.50
8506-8518 PB M 73796	Influence of obesity on the type of the electrocardiogram. By H. Blanke. Mar 31, 1938. In German.	1.50
8519-8531 PB M 73796	Relations between vital capacity, chest circumference, thoracic cross-section, body size, spirometric-index, and constitutional type. By H. Blumberg. Dec 16, 1937. In German.	1.50
8532-8558 PB M 73796	Course of hereditary transmission of progressive muscular dystrophy, based on genealogical examinations of own kinspeople. By K. A. Bodarwe. Dec 8, 1937. In German.	3.00
8559-8565 PB M 73796	Changes in the treatment of erysipelas. By M. Boden. Jan 19, 1938. In German.	3.00

8585-8594 PB M 73796 — The question of the occurrence of saturated sterol in human blood. By G. Böge. Oct 26, 1937. In German. 1.50

8595-8610 PB M 73796 — Investigations on comparative diagnostic values of the usual optotypes and on the optimum illumination in the determination of visual acuity. By H. Böhig. Nov 25, 1937. In German. 2.00

8611-8631 PB M 73796 — The problem of the circulatory effect of insulin. By G. Böse. Dec 16, 1937. In German. 2.50

8632-8688 PB M 73796 — Investigations on the nature of orthodontic movements of the teeth, especially during dilation of the upper jaw. By P. Boesen. 1939. In German. 6.00

8689-8704 PB M 73796 — Amyotrophic lateral sclerosis. Contribution to the origin on the basis of pathologic anatomic findings. By H.J. Bollig. Apr 26, 1939. In German. 1.50

8705-8714 PB M 73796 — Attempt to influence old tubercular foci in guinea pigs by treatment with beef serum. By A. Bonnertz. Sep 12, 1939. In German. 1.50

8715-8729 PB M 73796 — Influence of chemotherapy of gonorrhea on the blood pattern. By K. Bonnertz. Sep 20, 1939. In German. 1.50

8730-8742 PB M 73796 — Disturbance of the healing of wounds after aseptic abdominal operations. By W. Books. Nov 17, 1937. In German. 1.50

8743-8756 PB M 73796 — Significance of the "Umstimmung" of the organism by cutaneous exanthemata, for the prognosis of epidemic meningitis. By R. Bormann. May 13, 1939. In German. 1.50

8757-8778 PB M 73796 — Examinations of human and animal teeth, with the aid of the scratching method for the determining their hardness and structure. By J. Born. Jun 24, 1938. In German. 2.50

8779-8800 PB M 73796 — Increase of the content in blood of substances, ordinarily excreted into the urine, in cases of nephritis and nephrosis, and its dependence on the duration of the disease. By K. Born. Jun 27, 1939. In German. 2.50

8801-8823 PB M 73796 — Dental study on injuries caused by the abuse of tobacco, with special regard to the oral cavity and the oral organs. By E. Borns. Jun 22, 1938. In German. 2.50

8824-8836 PB M 73796 — Investigations on the significance of oxydase reactions and the hemochromogen spectrum in vegetable substances, for the forensic detection of blood. By G. Bosbach. Jun 18, 1938. In German. 1.50

8837-8850 PB M 73796 — Limits in the application of fluoroscopic examination. By A. Brener. Sep 25, 1939. In German. 1.50

8850-8864 PB M 73796 — Causes of the variations of heart size in healthy persons. By W. Broich. Jul 18, 1939. In German. 1.50

8865-8875 PB M 73796 — The fate of persons with gastroduodenal ulcer having undergone treatment. By W. Buch. Oct 25, 1938. In German. 1.50

8876-8888 PB M 73796 — The behavior of the T wave of electrocardiograms under the influence of respiration. By F. Büren Mar 1, 1938. In German. 1.50

8889-8906 PB M 73796 — Hereditary spastic spinal paralysis a clinical and heredo-biological contribution. By E. Bürgel. n.d. In German. 3.00

8907-8914 PB M 73796 — Housing conditions for persons suffering from open tuberculosis in a large industrial city. By H. Bungenstock. Mar 11, 1939. In German. 1.50

8915-8930 PB M 73796 — A contribution to the question of mixed tumors. By H. Burmeister. Nov 15, 1937. In German. 2.00

8931-8951 PB M 73796 — Simultaneous occurrence of bronchial asthma and eczema in childhood and their mutual influence. By F.J. Casper. Nov 16, 1937. In German. 2.50

8952-8969 PB M 73796 — A traumatic aneurism of the subclavian artery, with special consideration of the development of the saccular coat on traumatic aneurisms. By P. Castelle. Nov 23, 1938. In German. 2.00

8970-8981 PB M 73796 — Investigations of respiratory arrhythmia in silicosis. By J. Christ Dec 6, 1937. In German. 1.50

8982-9002 PB M 73796 — Lead injuries, with special regard to the mucous membrane of the mouth; their prevention and prophylaxis. By H. Coenen. Nov 8, 1938. In German. 2.50

9003-9016 PB M 73796 — Behavior of lumbar pressure in tuberculous meningitis. By J. Conzen. Jun 20, 1938. In German. 1.50

9017-9038 PB M 73796 — The importance of stratigraphy in pulmonary diseases. By W. Corman. Nov 2, 1938. In German. 2.50

9039-9052 PB M 73796 — Respiratory arrhythmia in cases of frequent extrasystoles. By H. Cramer. Aug 29, 1938. In German. 1.50

9053-9060 PB M 73796 — Effect of digitalis on the relative duration of the systole in cases of myodegeneratic cordis. By H. Derichs. Nov 24, 1937. In German. 1.50

9061-9081 PB M 73796 — Genealogical research on the family of Johann Wi, afflicted with muscular dystrophy. By F. Derix. Jun 13, 1938. In German. 2.50

9082-9098 PB M 73796 — Conglobation tendency of red blood cells in healthy and sick people. By H. Dettmer. Dec 6, 1937. In German. 2.00

9099-9114 PB M 73796 — The occurrence and frequency of rudimentary ribs on the first lumbar vertebra. By T. Dickmann. Jun 19, 1935. In German. 2.00

9115-9124 FB M 73796 — Investigations on respiratory arrhythmia in cases of emphysema. By K. Diedrichs. May 28, 1938. In German. 1.50

9125-9143 FB M 73796 — The present state of science with regard to protective inoculation against active tuberculosis and the fraction of the population for which the inoculation is desirable. By K. Dietz. Jun 27, 1939. In German. 2.00

9144-9158 FB M 73796 — A case of secondary syphilis with manifest symptoms giving a permanently seronegative Wassermann test. By O. Dillenburg. Feb 6, 1920. In German. 1.50

9159-9176 FB M 73796 — Contributions concerning disturbances in the carbohydrate metabolism following gastric operations. By M. Dolff. Jul 5, 1939. In German. 2.00

9177-9189 FB M 73796 — The importance of the duration of the systole in electrocardiograms in cases of valvular defects. By H. Dormeier. 1938. In German. 1.50

9190-9198 FB M 73796 — The respiratory fluctuations of the Q-wave in lead III of electrocardiograms. By M. Dressen. May 30, 1938. In German. 1.50

9199-9212 FB M 73796 — Syphilis of the stomach, and a report of 2 cases. By H. Dünsler. Nov 9, 1939. In German. 1.50

9213-9237 FB M 73796 — Cholesterol level in anemias. By H. Dünwald. Feb 19, 1938. In German. 2.50

FB M 74090. ERLANGEN, GERMANY, UNIVERSITY. A collection of doctors' theses. (FIAT Microfilm Reel C-233, Frames 4521-5528) 1937-1940. 1008 f. Price: Microfilm-$6.00 - Enlargement print-$101.50.
The 57 individual items of this FIAT microfilm reel are listed below. They will be available as enlargement prints. Please give FB and frame numbers when ordering individual items from this FIAT microfilm reel. In German.

Frames	Title	Price
4521-4547 FB M 74090	Dental caries and heredity. By K. Treus. 1934. In German.	$3.00
4548-4573 FB M 74090	Isolated injuries of teeth, mouth and jaws, as observed in members of the Rheniah agricultural cooperative group Düsseldorf. By P. Vergölts. 1939. In German.	3.00
4574-4582 FB M 74090	A case of alexia splenica. By G. Forster. 1934. In German.	1.50
4583-4597 FB M 74090	Isolated injuries of teeth and jaws, as observed in members of the cooperative group Düsseldorf of machine construction and small scale iron industry workers. By D. Voss. 1939. In German.	1.50
4598-4608 FB M 74090	The historical development of the treatment of trigeminal neuralgia. By F. -W. Weber. 1938. In German.	1.50
4609-4621 FB M 74090	Is acanthosis nigricans a precancerous disease? By W. Wadsmann. 1939. In German.	1.50
4622-4629 FB M 74090	Fluctuations of the hemoglobin and erythrocyte values of healthy children. By S. Weiss. 1939. In German.	1.50
4630-4637 FB M 74090	The sensitivity to strophanthin of amarthyroid feline hearts and the effect of vitamin C on it. By F. J. L. Weissbecher. 1938. In German.	1.50
4638-4646 FB M 74090	Examination of women affected with gonorrhea, by means of culture methods, particularly with regard to intramenstrual examinations. By E. Wende. 1939. In German.	1.50
4647-4661 FB M 74090	The differences between lysozyme (Fleming) and inhibins (Dold). By M. Wendling. 1939. In German.	1.50
4662-4674 FB M 74090	Statistical studies on the dental patients of the surgical department of the Freiburg university hospital in the period 1927-1937. By G. Werner. 1939. In German.	1.50
4675-4693 FB M 74090	Cutaneous sensitivity to tuberculosis of the children of Freiburg i. B. and of 20 rural communities of the environment. By F. Wiedemann. 1939. In German.	2.00
4694-4708 FB M 74090	Effect of cod-liver oil and other oils such as olive oil, peanut oil, vaseline oil, turpentine oil, mustard oil and cucumber oil on bacterial growth in cultures. By G. Wohnhas. 1939. In German.	1.50
4709-4722 FB M 74090	Further studies on the antimycotic effect of volatile oils. By F. K. Wolpers. 1939. In German.	1.50
4723-4730 FB M 74090	Histological examinations of the nervous system following nicotine poisoning. By P. W. Wong. 1939. In German.	1.50
4731-4753 FB M 74090	Tuberculous hemorrhages of the lung and their treatment, with special regard to bleeding by venesection. By F. Zeller. 1939. In German.	2.50
4754-4765 FB M 74090	Spectrophotometric studies on phosphate precipitations in urine. By E. Ziegler. 1935. In German.	1.50
4766-4787 FB M 74090	Contribution to the pathogenesis and treatment of diarrheic disorders in childhood. By H.-J. Hartenstein. n.d. In German.	2.50
4788-4795 FB M 74090	Vasomotor reactions in anoplexia. A contribution to the problem of central co-innervation. By W. Hauss. n.d. In German.	1.50
4796-4839 FB M 74090	Clinical and experimental studies on constitution and tendency to convulsions in epileptics. By H. -W. Jans. 1940. In German.	4.50
4840-4882 FB M 74090	Diagnosis and prognosis of intracranial hemorrhages arising during labor. By S. Liebe. 1940. In German.	4.50
4883-4893 FB M 74090	The pattern of serum protein, particularly the pathological changes of the albumin fraction. By F. Plötner. 1940. In German.	1.50
4894-4931 FB M 74090	Fluorescence phenomena and the porphyrin content of erythrocytes.	

By K.-A. Saggel. 1940. In German. 4.00

4933-4963 FB M 74090 — The loading with carbohydrates for testing the normal and abnormal carbohydrate metabolism in Addison's disease, acromegalia and diabetes mellitus. By G. Stötter. 1939. In German. 3.50

4964-4977 FB M 74090 — Investigations on the arterioles afferentes and the vascular corpuscles (Goormachtich-Becher's cell groups) in the kidney of man and mouse. By K. Appelt. 1940. In German. 1.50

4978-4989 FB M 74090 — Mortality and morbidity in women who underwent repeated caesarean sections, as observed at the maternity ward of the Leipzig university hospital in the period 1917-1939. By R. Arnedl. In German. 1.50

4990-4995 FB M 74090 — A special case of cancer of the thyroid. By D. Barth. 1940. In German. 1.50

4996-5014 FB M 74090 — The history of early orthopedic treatment of the jaw. By O. W. Baugut. 1940. In German. 2.00

5015-5027 FB M 74090 — Experimental contribution to the treatment of mercury poisonings of the kidney. By A. Beyer. 1940. In German. 1.50

5028-5040 FB M 74090 — Identical with the foregoing.

5041-5052 FB M 74090 — Late development of yeast hip joints, followed up from the second year after resetting up to the time of puberty. By S. Beyer. 1940. In German. 1.50

5053-5061 FB M 74090 — Change in structure of the tibial bone. By O. Böhmer. 1940. In German. 1.50

5062-5075 FB M 74090 — On operations for flat foot. Results in 16 cases operated on by Mohada. By B. Bohne. 1940. In German. 1.50

5076-5085 FB M 74090 — The tolerance of intensive antisyphilitic treatment of pregnant women. Influence on the birth weight of the newborn and on the weight of the placenta. By H. Dornemann. n.d. In German. 1.50

5086-5098 FB M 74090 — Indications for and results of version and subsequent extraction by the breech. By H. Bretschneider. 1940. In German. 1.50

5099-5138 FB M 74090 — Suggestions for a diet for pregnant women during the months of January and October. By F. Bruder. 1940. In German. 4.00

5139-5156 FB M 74090 — Temperature at the place of bone fractures in relation to the development of the callus. By A. Brückner. 1939. In German. 2.00

5157-5166 FB M 74090 — Results of insulin and cardiazol therapy, as experienced at the neurological department of the Leipzig university hospitals. By W. Buchheimer. 1940. In German. 1.50

5167-5172 FB M 74090 — Growth of certain bacteria on meat broth agar, enriched with cold-sterilized extract from steer testicles or thyroid, or from the tonsils or pineal gland of swine. By H. Delitz. 1940. In German. 1.50

5173-5184 FB M 74090 — Investigations on patients with skin diseases, by means of Muck's special adrenalin test. By W. Dietrich. 1940. In German. 1.50

5185-5199 FB M 74090 — Etiology and treatment of thrombosis. By H. Dirks. 1940. In German. 1.50

5200-5227 FB M 74090 — Are there seasonal fluctuations in the occurrence of premature births? By C. Dybeck. 1940. In German. 3.00

5228-5263 FB M 74090 — Effect of intravenous injections of "Bromsulin" on the white blood pattern of healthy horses. By H. Adler. 1940. In German. 4.00

5264-5278 FB M 74090 — Functional studies on the hyoid bone of horses. By H. Dreier. 1940. In German. 1.50

5279-5297 FB M 74090 — Studies for the determination of the strain of tubercle bacilli occurring in swine. By H. Gerbert. 1939. In German. 2.00

5298-5313 FB M 74090 — The problem of immunization against "para-anthrax." By R. Hansmann. 1940. In German. 2.00

5314-5330 FB M 74090 — Case of heterotopic mucous membrane from the rennet-bag, in the omasum of cattle. By J. Hetzmannseder. 1940. In German. 2.00

5331-5345 FB M 74090 — Tuberculosis in the wild rat. By F. Hillenbrand. 1940. In German. 1.50

5346-5363 FB M 74090 — Potassium content of the blood serum of horses affected with surgical diseases. By F. Keller. 1940. In German. 2.00

5364-5380 FB M 74090 — Occurrence and detection of tubercle bacilli in the circulating blood of experimental animals and cattle. By H. -G. Kluge. 1940. In German. 2.00

5381-5402 FB M 74090 — Treatment of eczema in dogs with "Blankosulf", with special regard to a disturbance of the hydrochloric acid secretion of the stomach as an etiologic symptom. By H. Kothe. 1939. In German. 2.50

5403-5431 FB M 74090 — Contribution to the history of the veterinary service in the city of Oppeln. By W. Kott. 1940. In German. 3.00

5432-5454 FB M 74090 — The calcium level of the blood serum of horses affected with surgical diseases. By G. W. Driebel. 1940. In German. 2.50

5455-5493 FB M 74090 — Suggestions for the diet for pregnant women during the months of April and July. By G. Malich. 1940. In German. 4.00

5494-5508 FB M 74090 — Clinical and statistical studies and experiences regarding fractures of the upper extremities resulting from traffic accidents. By H.-W. Ehmann. 1940. In German. 1.50

5509-5516 PB M 74090 **Results of the treatment of early scoliosis.** By M. Burhardt. n.d. In German. 1.50

5517-5528 PB M 74090 **Follow-up examinations in children treated with eutrocid for syphilis connatalis.** By J. Engelhart. 1940. In German. 1.50

PB M 73360. ERLANGEN, GERMANY, UNIVERSITY. **A collection of doctors' theses.** (FIAT Microfilm Reel D 179, Frames 8648-9290). 1944. 643 f. Price: Microfilm-$5.00 - Enlargement Print-$64.50

Individual items of this FIAT microfilm reel are listed below. They will be available as enlargement prints. Please give PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
8648-8699 PB M 73360	The problem of the examination for vascular injuries, with special consideration of peri-arterial sympathectomy according to Leriche. By J. Thomas. n.d. In German. May reproduce poorly.	$5.00
8700-8743 PB M 73360	Retroperitoneal lipomata, with special consideration of pelvic lipomata. By P. Trabold. n.d. In German.	4.50
8744-8768 PB M 73360	Results obtained in the treatment of glaucoma, by means of trephining cyclodialysis carried out in the ophthalmological department of the Erlangen university hospital from April 1939 to December 1943. By W. Wagner. n.d. In German.	2.50
8769-8824 PB M 73360	Contribution to the judgement of the legal contracting capacity. By A. Welbers. n.d. In German.	6.00
8825-8879 PB M 73360	Pharmacological study of tetrammine-copper (II) sulfate. By J. Wesserer. 1944. In German.	5.50
8880-8916 PB M 73360	The dreams in mental diseases. By B. Weihermüller. n.d. In German.	4.00
8917-8946 PB M 73360	Duration of and mortality from lobar pneumonia. By H. Wichers. n.d. In German.	3.00
8947-9000 PB M 73360	The knowledge of the so-called "dysgerminoma" of the ovary. By J. Wiegmann. n.d. In German.	5.50
9001-9058 PB M 73360	Comparisons between the intra- and extracapsular extractions of the cataract. By W. Winkler. n.d. In German.	6.00
9059-9139 PB M 73360	Therapeutic pneumothorax and pleural effusion. By F. Wolff. n.d. In German.	8.50
9140-9234 PB M 73360	Pupils of Nuremberg schools for backward children. By W. Zang. 1944. In German.	9.50
9235-9290 PB M 73360	Occurence of obstacles and difficulties in breast feeding with working women. By C. Zechiesche. n.d. In German.	6.00

PB M 73878. ERLANGEN, GERMANY UNIVERSITY. **A collection of doctors' theses.** (FIAT Microfilm Reel I 248, Frames 9801-9999 and 1-893). 1942-1944. 992 f. Price: Microfilm-$6.00 - Enlargement print-$99.50.

The 33 individual items of this FIAT microfilm reel are listed below. They will be available as enlargement prints. Please give PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
9801 - 9823 PB M 73878	Onset of pathological features in myopathies. By Rolf Julitz. 1943. In German.	$2.50
9824 - 9840 PB M 73878	Indication for and result of anterior hysterotomy, October 1, 1935 - September 30, 1941. By Hans-Siegfried Jäger. 1943. In German.	2.00
9841 - 9856 PB M 73878	The nuclei of ossification in dislocations of the hip joint. By Siegfried Hunger. 1943. In German.	2.00
9857 - 9866 PB M 73878	The surgical treatment of severe hemorrhages in gastric and duodena ulcers. By Erika Haspel. 1943. In German.	1.50
9867 - 9881 PB M 73878	Faulty diagnoses in cases of brain tumor in patients of advanced age. By Hans-Gottfried Helm. n.d. In German.	1.50
9882 - 9901 PB M 73878	Effect of injections of corpus luteum hormone on the potassium and sodium content of the serum and on the potassium content of the urine. By Heinrich Haude. 1943. In German.	2.00
9902 - 9911 PB M 73878	489 patients with formations of concrement in the excretory urinary passages, a contribution to the etiology and meteorobiology of this condition. By Ernst Hauck. 1943. In German.	1.50
9912 - 9920 PB M 73878	Grenz rays in alopecia areata. By Gerhard Haase. 1942. In German.	1.50
9921 - 9946 PB M 73878	Results of fluoroscopic examinations in 21,350 adolescents. By Karl-Egon Gaul. 1943. In German.	3.00
9947 - 9964 PB M 73878	Experience with zinc chloride therapy in uterine hemorrhages. By Paul Helmut Wolfgang Fink. 1942. In German.	2.00
9965 - 9976 PB M 73878	Morbus Rothmund/cataracta dermatogenes/cataracta syndermatotica. By Peter Evers. n.d. In German.	1.50
9977 - 9999 1 - 132 PB M 73878	Consideration of meningeomata with respect to the problem of organoid tumors. By Hasso Essbach. 1943. In German.	16.00
133 - 141 PB M 73878	Narrowings of the intervertebral discs in the region of the lumbar spine. By Rolf Theis Eden. 1943. In German.	1.50
142 - 152 PB M 73878	Diagnosis and prognosis of paroxysmal tachycardia in childhood. By Nanny-Luise Dänselmann. 1943. In German.	1.50
153 - 165 PB M 73878	The age distribution of cholecystopathies. By Otto Dathe. 1942. In German.	1.50
166 - 179 PB M 73878	The treatment of Madelung's disease. By Karl-Theodor Busch. 1943. In German.	1.50

180 - 231 PB M 73878 — The sanitary service and health conditions in the penitentiary orphanage and poor-house, later called "penitentiary and reformatory" in Waldheim (Saxony), from its foundation in 1716 up to 1900.
By Johannes W. E. Büttner. 1942. In German. 5.50

232 - 248 PB M 73878 — Rheumatic hygromata of the tendon sheaths. By Heinz Brandt. 1943. In German. 2.00

249 - 262 PB M 73878 — Gun-shot injuries of the maxillary sinus, discussed with the help of the war time literature.
By Kristina Bijewa. 1943. In German. 1.50

263 - 274 PB M 73878 — Gynecological hemorrhages in women aged between 30 and 50 years.
By Christa Bahrs née Westphal. 1943. In German. 1.50

275 - 284 PB M 73878 — Antisepsis and asepsis as observed by physicians outside the hospital with special regard to the sterilization of syringes.
By Theobald Arndt. 1943. In German. 1.50

285 - 324 PB M 73878 — Hyperglycemia and glycosuria in persons poisoned by carbon monoxide. By Hans Appelt. 1943. In German. 4.00

325 - 387 PB M 73878 — Partial suspension of the pelvis by the bones. A new method for avoiding congestion of wound secretions and decubitus, in cases with large wounds of the soft parts in the resting region of the pelvis.
By Wolfgang Müller (Schwabach). 1942. In German. 6.50

388 - 446 PB M 73878 — Cardiac and circulatory complications in cases of malignant diphtheria. By Hans Müller. n.d. In German. 6.00

447 - 506 PB M 73878 — Insiduous fractures of the neck of the femur and their treatment. By Otto Meyer. n.d. In German. 6.00

507 - 539 PB M 73878 — Dental treatment in pregnancy and puerperium.
By Hanns Merz. n.d. In German. 3.50

540 - 597 PB M 73878 — The methods of temperature measurement in peripheral circulatory disorders.
By Matei Georgieff Matteeff. 1944. In German. 6.00

598 - 643 PB M 73878 — Experiments for establishing a constant propertion between the N-value of protein-like compounds and the N-value of non-protein compounds from the blood of persons suffering from carcinoma and sarcoma.
By Johannes Rusbensaal. n.d. In German. 5.00

644 - 681 PB M 73878 — Results of the sulfonamide treatment of otogenic and rhinogenic meningitis. By Juan Pam-Soldan. n.d. In German. 4.00

682 - 732 PB M 73878 — The knowledge of tuberculous cirrhosis of the liver.
By Georg Pape. n.d. In German. 5.50

733 - 796 PB M 73878 — Dependance on the position of the heart axis, of the co-called "positional left-side type" and of the left-side type due to cardiac hypertrophy. By Karl Maennlein. 1944. In German. 6.50

797 - 848 PB M 73878 — Intestinal sarcomata and their prognosis. By Hermann Lutz. n.d. In German. 5.50

849 - 893 PB M 73878 — Prognosis of multiple sclerosis.
By Erich Lindauer. 1943. In German. 4.50

PB M 73879. ERLANGEN, GERMANY, UNIVERSITY. A collection of doctors' theses. (FIAT Microfilm Reel I 249, Frames 895-2305). 1940-1944. 1362 f. Price: Microfilm-$6.00 - Enlargement Print-$136.50.
The 35 individual items of this FIAT microfilm reel are listed below. They will be available as enlargement prints. Please give PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
895 - 970 PB M 73879	Contribution to the problem of unlike propagation among different strata of population. (Results of examinations of school children in the districts of Lichtenfels and Staffelstein in upper Franconia. By Herrmann Kuhn. 1940. In German.	$8.00
971 - 996 PB M 73879	The malignant melanoma of the parotis and surrounding tissues (based on cases observed in the pathologic-anatomical Institute of the University at Erlangen during 1928-1942. By Ilse Kotzott. n.d. In German.	3.00
997 - 1036 PB M 73879	The problem of spontaneous hypoglycemia. By Friedrich Klarner. 1944. In German.	4.00
1037 - 1066 PB M 73879	Deafness resulting from meningitis. By Wolfgang Kessler. n.d. In German.	3.00
1067 - 1101 PB M 73879	Pathology and symptomatology of sarcomata of the retothelium based on 40 cases from the pathological institute at Erlangen. By Adolf Kaesbauer. n.d. In German.	3.50
1102 - 1117 PB M 73879	Fractures of the lower jaw and their treatment at the university hospital of Erlangen during 1939-1943. By Gertrud Sternal. 1944. In German.	2.00
1118 - 1129 PB M 73879	Cases of esophageal cancer among the postmortem cases of the Erlangen pathological institute during the years 1929 to 1940. By Hans Kunz. 1942. In German.	1.50
1130 - 1151 PB M 73879	Critical consideration of the results obtained at the state school for midwives, the maternity and gynecological hospitals of Bamberg during the years 1940-1942. By Georg K.H. Fischer. 1943. In German.	2.50
1152 - 1201 PB M 73879	Classification of obliterating endarteritis according to symp-	

toms. An attempt to clarify its etiology. By Kurt Danecke. 1941. In German. 5.00

1202 - 1224 PB M 73879 — Diagnostic significance of the surcharge electrocardiogram. By Ernst Baur. 1943. In German. 2.50

1225 - 1243 PB M 73879 — Individual differences in sensation upon simultaneous stimulation of both eyes by different colors. By Hermann Baier. 1944. In German. 2.00

1244 - 1277 PB M 73879 — Animal experiments and clinical and x-ray studies on the genesis of the "common pseudo-arthrosis". By Wilhelm. 1941. In German. 3.50

1278 - 1307 PB M 73879 — Manual removal of the placenta. By Annemarie Zwiauer née Buellman. n.d. In German. 3.00

1308 - 1368 PB M 73879 — Children with high birth weight and gigantism. By Hildegard Zimmer née Pistor. n.d. In German. 6.50

1369 - 1393 PB M 73879 — A case of acute anterior poliomyelitis in old age. By Erika Woitaschek. n.d. In German. 2.50

1394 - 1425 PB M 73879 — Diseases of the gall-bladder without symptoms in women. By Konrad Welker. 1944. In German. 3.50

1426 - 1450 PB M 73879 — Reduction of vital capacity after operations, with special regard to operations for rectal cancer. By Elisabeth Stroothenke. n.d. In German. 2.50

1451 - 1515 PB M 73879 — Pathological anatomy of typhus, studied in 19 dissection cases. By Peter Striegel. n.d. In German. 6.50

1516 - 1559 PB M 73879 — Fractures of the lower jaw and their treatment at the surgical department of the Erlangen university hospital during 1939-1943. By Gertrud Sternal. n.d. In German. 4.50

1560 - 1591 PB M 73879 — A case of recto-vesical communication with paraurethral fistula and anal abresia. By Irmgard Staehlin. n.d. In German. 3.50

1592 - 1644 PB M 73879 — Problems of etiology, course and treatment of chronic pemphigus arising from observations on patients of the dermatological department of the Erlangen university hospital during 1922-1942. By Paul Sitzberger. n.d. In German. 5.50

1645 - 1670 PB M 73879 — Sulfonamide therapy of pneumonia in childhood. By Ursula Schwab. n.d. In German. 3.00

1671 - 1693 PB M 73879 — Myxoma of the nose and of its accessory sinuses. By Herbert Schulz. n.d. In German. 2.50

1694 - 1735 PB M 73879 — Anatomy and physiology of the synapse. By Wilhelm Hans Schubert. 1944. In German. 4.50

1736 - 1776 PB M 73879 — Identical with numbers 1694-1735.

1777 - 1824 PB M 73879 — These frames have been removed from the reel.

1825 - 1851 PB M 73879 — Carcinoma of the maxillary sinus on the basis of late syphilis. By Fritz Schneidt. Jul 1944. In German. 3.00

1852 - 1893 PB M 73879 — Results of radical operations of inflammations of the maxillary sinus. By Reinhard Schmutler. n.d. In German. 4.50

1894 - 1924 PB M 73879 — Experiments for the indirect detection of isolated pathogenic agents, by propagation of the phagocytes. By Albrecht Schertel. n.d. In German. 3.50

1925 - 1972 PB M 73879 — Prostigmine therapy of polyneuritis. By Paul Schering. n.d. In German. 5.00

1973 - 2027 PB M 73879 — Course of diphtheria as observed at the medical department of the Erlangen university hospital during the past 10 years. By Rupprecht Schaumbert 1944. In German. 5.50

2028 - 2085 PB M 73879 — Metritis dissecans. By Andreas Schaefer. n.d. In German. 6.00

2086 - 2100 PB M 73879 — X-ray therapy of gastric carcinoma. By Josef Rupprecht. 1943. In German. 1.50

2101 - 2118 PB M 73879 — Prevention and treatment of cases with pregnancy carried beyond term. By Gerhard Schopp. 1942. In German. 2.00

2119 - 2136 PB M 73879 — Congenital hernia of the umbilical cord, with report of three surgically cured cases. By Carlhanns Koeppele. 1943. In German. 2.00

2137 - 2153 PB M 73879 — Four new cases of Oguchi's disease. By Eberhard Fleischer. 1943. In German. 2.00

2154 - 2192 PB M 73879 — These numbers are identical with numbers 2137 - 2153.

2193 - 2219 PB M 73879 — Contribution to the knowledge of injuries by lightning. By Michael Waffler. n.d. In German. 3.00

2220 - 2305 PB M 73879 — Ulcers and perforations at the level of the gastrointestinal tract in cases of pemphigus. With description of 2 cases. By Hermann Vill. n.d. In German. 9.00

PB M 73882. ERLANGEN, GERMANY, UNIVERSITY. A collection of theses in the field of medicine and dentistry. (FIAT Microfilm Reel I 251, frames 3253-4161). 1941-1943. 909 f. Price: Microfilm-$1.00 - Enlargement Print-$78.00. The 23 individual items of this FIAT microfilm reel are listed below. They will be available as enlargement prints. Please give PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
3253-3271 PB M 73882	Fatalities caused by spontaneous internal bleeding.	

By Hermann Geilhaupt. 1943. In German. 2.00

3272 - 3303 PB M 73882 — Contribution to the psychology of schizophrenic murderers. By Karl Frisch. 1942. In German. 3.50

3304 - 3320 PB M 73882 — Schizophrenia-like transitory symptoms in general paresis. By Ludwig Farrenkopf. 1943. In German. 2.00

3321 - 3373 PB M 73882 — Operation of the non-resectable gastric ulcer, according to Madlener. By Friedlind Erdmannsdorffer. 1943. In German. 5.50

3374 - 3407 PB M 73882 — Frequency and course of primary glaucoma in the years of war and peace. (Compiled from the cases of the opthalmological department of Erlangen university hospital). By Konrad Dengler. 1942. In German. 3.50

3408 - 3445 PB M 73882 — Care of the duodenal stump after gastric resection in difficult cases. By Hans Bauer. 1943. In German. 4.00

3446 - 3474 PB M 73882 — Quensecht's shadows; their morphology, genesis and clinical significance. By Elisabeth Amann. 1943. In German. 3.00

3475 - 3507 PB M 73882 — Occlusion of the eustachian tube as a symptom of nasopharyngeal tumor. By Axel Wernsdorfer. 1942. In German. 3.50

3508 - 3527 PB M 73882 — Contributions to the isolated albinism of the bulb and fundus, and its heredity. By Johanna Röhrig. 1943. In German. 2.00

3528 - 3550 PB M 73882 — A case of especially high position of the bulbus venae jugularis. By Heinz Neumann. 1943. In German. 2.50

3551 - 3592 PB M 73882 — Delantin addiction. By Johann Lipp. 1942. In German. 4.50

3593 - 3623 PB M 73882 — Contribution to the treatment of pneumonia. By Helmut Lehmann. 1943. In German. 3.50

3624 - 3648 PB M 73882 — Occlusions of the accessory nasal sinuses and their consequences. By Fritz Kretzschmar. 1943. In German. 2.50

3649 - 3689 PB M 73882 — Injuries by lightning and high tension current. By Ludwig Rösler. 1943. In German. May reproduce poorly. 4.50

3690 - 3718 PB M 73882 — Should congenital teeth be removed? By Hans Berk. 1943. In German. 3.00

3719 - 3763 PB M 73882 — Contribution to the knowledge of Riedel's "iron-hard struma". By Helmut Anderlohr. 1943. In German. 4.50

3764 - 3783 PB M 73882 — Two cases of blood transfusion with heterogenous blood groups. By Walter Teusch. 1943. In German. 2.00

3784 - 3823 PB M 73882 — The importance of early care for the deaf-and-dumb. By Elimar Schönhärl. In German. 4.00

3824 - 3873 PB M 73882 — Development of chemotherapy of gonorrhea. By Helmut Schruffer. 1942. In German. 5.00

3874 - 3955 PB M 73882 — The pregnancy tests and their evaluation, with special regard to the Aschheim-Zondek test. By Ernst Seeger. 1943. In German. 8.50

3956 - 4017 PB M 73882 — The hygiene of the surgeon. By Ludwig Liebentritt. 1942. In German. May reproduce poorly. 6.50

4018 - 4077 PB M 73882 — Dental care in the Army during the moving into assembly positions at the west wall in 1939/40. By Benedikt Spörlein. 1941. In German. 6.00

4078 - 4161 PB M 73882 — Diagnosis and treatment of primary bone tumors of the skeletal system, with special regard to cases treated in the surgical department of the university hospital. By Rudolf Steudigel. 1942. In German. 8.50

METEOROLOGY AND CLIMATOLOGY

*PB L 85148. ANDERSON, NILS G. Status of German wartime meteorology, as indicated by published material. (FIAT Tech Bulletin T 51). May 1947. 5 p. Price: Mimeo-$0.25

A comprehensive study is given of the German National Meteorological Service with particular emphasis placed on its library, which was claimed to be the most inclusive and complete one in the world. In space its coverage is world wide and in time coeval with the science itself. Brief accounts are given of the various sections and their work.

PB L 87419. BAUM, WERNER A. An annotated bibliography on instrumentation and methodology for microclimatic purposes. (QM Res & Development Environmental Protection Series Rept 124, Part I). Oct 1947. 98 p. Price: Microfilm-$3.25 - Photostat-$10.00

The present annotated bibliography on instrumentation and methodology for microclimatic purposes is intended to serve as a basic tool for future investigations. It should prove quite useful to the investigator confronted with the task of preparing or selecting instruments and laying out a plan of operation for a microclimatic project. The bibliography is divided into four basic sections: (A) lists papers in which new instruments or new design and construction features are discussed; (B) lists papers which deal with intercomparisons of instruments, accuracy, calibration and theory of instruments, and similar topics; (C) deals with papers on methodological problems such as efficient sampling of microclimatic conditions, representativity of observations, etc.; and (D) deals with miscellaneous items which may be of interest. The bibliography includes not only references to instruments specifically designed for microclimatic purposes but also those on instruments which could be used for or adapted to microclimatic purposes. To limit the size of the work emphasis has been placed on work done during the past 25 years. In all, 550 separate references in ten languages are included in the bibliography, those in English numbering 270, German 180, French 47, Russian 26, Japanese 11, Italian 5, Spanish 5, Hungarian 3, Dutch 2, and Ukrainian 1.

PB L 86448. BECKER, WM. J. Service test of radiosonde AN/AMT-3 for aerial weather reconnaissance purpose. (Air Proving Ground, Eglin Field Fla. Project 3-46-32). Oct 1947. 154 p. Price: Microfilm-$4.75 - Photostat-$16.00

The purpose of the radiosonde AN/AMT-3 is to provide the United States Air Force with a suitable method of obtaining atmospheric soundings over water, enemy territory, or remote areas. This report covers an investigation on the utility of a parachute radiosonde in securing additional weather information on weather reconnaissance flights, to determine the most advantageous method of operation, and to determine the personnel requirements for overall operation. Tables, charts, graphs, and photographs are included.

PB L 85728. DIMMIG, HOWARD L. Service test of Kytoon. (Air Proving Ground, Eglin Field Fla. Project 3-47-6). Aug 1947. 20 p. Price: Microfilm-$1.25 - Photostat-$2.00

This report covers a service test made in order to determine the functional reliability of the Kytoon for holding radio antennas aloft, and to compare the Kytoon with the standard M-278 balloon and the M-357A kite. It was concluded that the Kytoon was not functionally superior to the balloon and did not provide a more dependable means of holding the antenna aloft under varying weather conditions than the balloon and the kite. It was recommended that no further consideration be given to the development in view of its inferior performance.

PB L 88501. GEIGER, RUDOLF. The climate of the layer of air near the ground. Translation. (AAF Weather Div Rept 752) Jul 1944. 154 p. Price: Microfilm-$4.75 - Photostat-$16.00

The German original of this translation, which was made for the use of the Soil Conservation Service, was published in Die Wissenschaft, v. 78, 1927. "Plant climate," with which the work is concerned, may be given a rough limit of about 1.5 meters above the ground. The general sections of the work are: (1) Physics of the layer of air near the ground; (2) Orographic microclimatology; (3) Special plant climatology (with four chapters on forest meteorology); and (4) Frost in the lowest layer of air. A bibliography is appended.

PB L 81124. MCCOY, H. M. Radio meteorograph data. Part I. Description and technical specifications for the radiosonde RfW model Lang. (AAF T-2 Translation 1098) Jul 1947. 26 p. Price: Microfilm-$1.50 - Photostat-$3.00

The radio meteorograph transmits, by short wave, meteorological data such as air pressure, air temperature and relative humidity, from a balloon. The measured values are transmitted from the balloon, received, recorded and evaluated on the ground. Detailed description of each part, operation and calibration of the entire equipment are given. Tables, diagrams, and graphs are included.

PHOTOGRAPHIC AND OPTICAL GOODS (INCLUDING PHOTOGRAPHIC PROCESSING)

PB L 81887. ABBOTT, H. L. Japanese telescopic sights. (AFPAC Ordnance Intelligence Rept 119). Dec 1945. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00

A very brief description is given of the following Japanese telescopic sights: (I) type 1B, 4 x 7°; (II) 2.5 x 13°; and (III) type 99, 4 x 14° for tank gun.

PB L 87371. BOWEY, E. Methods of graticule production at J. D. Möller, Wedel/Holstein. (BIOS Final Rept 1552, Item 9). Dec 1945. 168 p. Price: Microfilm-$5.00 - Photostat-$17.00

This report is an attempt to supply as much detail as possible so as to enable the German methods to be repeated elsewhere. The two main graticule processes which formed the basis of the investigation were both founded on wet collodion plate technique. The first is a collodion silver transfer method, while the second is an extension of this process whereby the final graticule pattern is made permanent. Both methods may be readily adapted for mass production. One notable feature common to both the above methods is that, within certain limits, the prepared glass to which the pattern is transfered may be of any size or shape, and this also applies to curved surfaces if the radius of curvature is not too great, although cylindrical surfaces present little difficulty whatever the curvature. In appendix B is information on Carl Zeiss methods. Photographs, drawings and plans are attached.

PB L 87342. BUNGAY, W. A. and others. Engineers' sensitised material and allied products. (BIOS Final Rept 1475, Item 22). Jul 1945. 36 p. Price: Microfilm-$1.75 - Photostat-$4.00

The targets included in this report are: (1) Kalle & Co., Wiesbaden - Biebrich; (2) Richard Schwickert A. G., Freiburg, Baden; (3) J. P. Sonntag G. m. b. H., Emmendingen, Baden; (4) Renker-Belipa, Duren; (5) Gunther-Wagner, Hanover; (6) Sepang & Co., Stuttgart; (7) I. G. Farbenindustrie, Frankfurt, Höchst; and (8) I. G. Farbenindustrie, Leverkusen; and cover such products as coated papers, foils, and cloth, oiled papers, waterproof transparent tracing cloths and papers, waterproof inks, and developing processes.

PB L 85162. DIMITROFF, G. Z. Japanese optics. (Naval Tech Mission to Japan Index I-05). Dec 1945. 58 p. Price: Mimeo-$1.50

This report covers the following: (1) pot making, (2) the furnace, (3) optical glass produced, (4) lens systems, (5) grinding and polishing, and (6) "coating" for the purpose of increasing the transparency of glass surfaces. Diagrams, tables and photographs are included.

PB L 81877. LAWSON, HAROLD B. Service test of kit photographic, field processing 9" X 18" contact printing, airborne, type N-10. (Air Proving Ground, Eglin Field Fla. Project 6-47-2). Jun 1947. 19 p. Price: Microfilm-$1.25 - Photostat-$2.00

This kit was developed primarily for field laboratory use in the printing of 9" x 18" or smaller negatives in either roll or cut form. The kit is of plywood construction with adjustable legs and a cover which can be utilized as a table. The kit provides a supply of accessories necessary for the field laboratory printing process as well as tools and spare parts for field maintenance. This report describes the test which was activated to determine the suitability for standardization and use by the Army Air Forces. Eleven photographs are included.

PB L 81900. SCHMIESCHEK, U. Experiments to increase the stability of supersensitized infrared films by organic stabilizers. (AAF T-2 Translation 2097). Aug 1947. 8 p. Price: Microfilm-$1.00 - Photostat-$1.00

Agfa 850 infrared films were supersensitized according to the KCH-process and then stabilized in baths containing various percentages of imidazole, thiourea and thioglycolic acid. Thioglycolic acid used as stabilizer, after supersensitization with potassium hydroxide baths, yielded a material which after nine weeks of storage at 20 to 28 degrees C, shows the same cloudiness as the original material, but a seven times larger infrared sensitivity.

* PB L 86693. TUNSTEAD, J. and WRIGHT, C. T. Interrogation of Prof. Schober, Apr. 25, 1946. (Research into physiological optics and illumination). (BIOS Interrogation Rept 136). Sep 1946. 2 p. Price: Microfilm-$1.00 - Photostat-$1.00
Prof. Schober was concerned with a variety of problems in physiological optics and illumination that arose in the German Navy, e.g., night myopia, night vision, magnification and exit pupil of hand-held binoculars, use of red light for dark adaptation, instrument lighting, classification of optical instruments by the measurement of the threshold of brightness difference and the transmission factor.

PB L 81718. U. S. BUREAU OF ORDNANCE. Gun camera, Mark VII, mod. 1. (Pamphlet 765). Mar 1940. 32 p. Price: Microfilm-$1.75 - Photostat-$4.00
The principal purpose of this handbook is to assist those who use the gun camera equipped with heaters. The text and photographic plates showing the various units and assemblies will be of great assistance in routine inspection and repair work, as well as in the use of the camera. Sufficient information will be found for all routine field maintenance. If the instructions are followed the efficiency of the gun camera will be greatly increased.

PB L 81889. U. S. 5250th TECHNICAL INTELLIGENCE CO. ORDNANCE ANALYSIS SECTION. Range finder, 1-meter base (15 X 3.5°). (Rept 152). Dec 1945. 2 p. Price: Microfilm-$1.00 - Photostat-$1.00
As in other German-designed range finders the coincidence and height of image adjustment rollers are spaced about the periphery of the outer tube and are covered by a single sleeve. A graphical altitude computer is attached to the right-end box. The instrument is mounted on telescoping pedestal placed and used with the 105-mm gun. Elevation mechanism is contained in the cradle. Photograph attached. This is captured Japanese materiel.

PB L 81888.. U. S. 5250th TECHNICAL INTELLIGENCE CO. ORDNANCE ANALYSIS SECTION. Range finder, stereoscopic, 1.5-meter base (20 X 2.5°). (Rept 151). Dec 1945. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00
The instrument is mounted on a telescoping pedestal so that it may be raised and lowered through a hatch in the roof of the car. The only apparent unusual design features of the range finder are the use of two graphical altitude computers and the method of correcting for range. Photographs are attached. This is captured Japanese materiel.

PHYSICS

General

PB L 87788. ARAKI, GENTARO. Theory of elliptically polarised photons. n. d. 20 p. Price: Microfilm-$1.25 - Photostat-$2.00
This document is written in English and is a generalisation of a previous paper by the author. Its purpose is to work out a complete theory of polarisations of photons and spectral lines; to determine an elliptically polarised state of a photon in a scheme of the second quantization; and to apply the general theory thus obtained to special phenomena. Four diagrams and various mathematical formulae are included. The author is a member of the Department of Industrial Chemistry, Kyoto University.

PB L 87224. BROGDEN, W. J. and MILLER, GEORGE. Physiological noise generated under earphone cushions. (Harvard Univ Psycho-Acoustic Lab Psycho Navy Res Rept 31), Jul 1947. 4 p. Price: Microfilm-$1.00 - Photostat-$1.00.
Listeners were required to match the quality and intensity of a low frequency ambient noise to the quality and intensity of the noise which they heard when they held earphones over both ears. A sound-pressure of 55 or 60 db of rumbling, low frequency noise can be generated by the tremor of the tonic contractions of hand and arm muscles. Reprinted from the Journal of the Acoustical Society of America, July 1947.

PB L 81334. CALIFORNIA. UNIVERSITY. DIVISION OF WAR RESEARCH. Conclusions derived from the analysis of transmission data obtained during harbor surveys. (Rept UCWR 1110). Oct 1943. 25 p. Price: Microfilm-$1.50 - Photostat-$3.00
These data were obtained with the New London four-channel system, which recorded sound at the frequencies 0.6, 2.0, 8, and 20. kc. These were emitted by pure tone sources, and the received intensity levels were recorded in db above 0.0002 dynes/cm^2 as a function of the distance between source and receiver. Typical graphs of the 20 kc results are shown in Figs. 1 to 3; of the 0.6 kc results, in Figs. 4 to 6. The source was at a depth of 8.6 ft, the hydrophone at 23 ft. Oceanographic data were collected simultaneously with the acoustic measurements. These data include the character of the sea surface, sea bottom, and the water. Tables and graphs are included.

PB L 81332. CALIFORNIA. UNIVERSITY. DIVISION OF WAR RESEARCH. Movement in the ocean. Memorandum report. Nov 1942. 11 p. Price: Microfilm-$1.25 - Photostat-$2.00
A study of movement in the ocean leads to many new and complex problems. The incomplete discussion presented is a combination of conjecture and analysis of known conditions. The few available measurements in the ocean were used as well as the data from the laboratory test on wave motion at the University of Iowa. The contents are intended to serve as a basis for further study by the indication of possible methods of attack. Most of the conclusions are of the nature of possibilities rather than experimental conclusions.

PB L 85564. DOW, NORRIS F. The analysis of strains indicated by multiple-strand resistance-type wire strain gages used as rosettes. (Natl Advisory Committee for Aeronautics Rept L-536). Jan 1943. 19 p. Price: Microfilm-$1.25 - Photostat-$2.00
Methods are given for making the necessary corrections to the strains indicated by multiple-strand resistance-type wire strain gages used singly or as rosettes to measure strains at an angle to the principal strain. The results of tests to determine the validity of the methods of correction are reported. A rosette arrangement having several advantages over the arrangements now commonly in use is described.

PB L 81340. DUVALL, GEORGE E. Scattering of underwater sound by solid particles and air bubbles. (Calif Univ Div War Res Rept NR0). Feb 1943. 11 p. Price: Microfilm-$1.25 - Photostat-$2.00
This memorandum is a summary of theoretical results concerning the scattering of sound from air bubbles and from solid spherical particles. An attempt is made to account for the effects of viscosity and heat conduction in two of the three regions into which the scattering falls. These regions are: (1) the region of large radii in which the laws of geometric reflection may be applied, (2) a transition zone, and (3) the Rayleigh region. Each of these three regions is characterized by the validity of a different approximate law. Two charts and one table are included.

PB L 86059. GRATE, HAROLD AND LEVIN, L. ROSS. Data on buckling strength of curved sheet in compression. (Natl Advisory Committee for Aeronautics Rept L 557; AR Rept 3J04). Oct 1943. 13 p. Price: Microfilm-$1.25 - Photostat-$2.00
Tests were made of curved panels of four different thicknesses and with radius-thickness ratios varying from about 150 to ∞. Results are also included of some tests that were reported previously. The data presented lead to the conclusion that for practical engineering use the critical compressive stress for a curved sheet between stiffeners is given by the larger of the following: (a) The critical compressive stress for an unstiffened circular cylinder of the same radius-thickness ratio; (b) The critical compressive stress for the same sheet when flat. It is indicated from the tests made that there is a certain value of radius-thickness ratio r/t, varying with the skin thickness, below which the critical stress for repeated loading is less than that obtained upon first application of the load. If, therefore, the value of r/t for a particular structural part is below this value, the part should be so designed that it will not buckle.

PB L 85544-S. JOHNSON, MARTIN and others. Ambient noise survey, Miami area. (Supplement to Report D46A/R470, PB 85544) (Columbia Univ Div of War Res Rept D46A/R532). Jan 1944. 66 p. Price: Microfilm-$2.50 - Photostat-$7.00;
This memorandum presents material supplementary to that included in Memorandum for File D46A/R470 "Ambient Noise Survey (First four cruises)" August 31, 1943, which describes the results of measurements made on background noise in the waters of the Bahamas and Florida coast. Tentative conclusions are offered, much more detailed oceanographic information is included, types of ambient noises are discussed, deep water measurement results have been collected, and all of the measurements made on the last cruise, from Miami to New London, have been included. Also included is the latest information on the hydrophone sensitivities and small corrections to be made in all measurements to convert them to absolute levels. Shrimp crackle was generally found over all of the Florida and Bahaman coastal waters, and was encountered in the vicinity of Cape Lookout. It was found in depths as great as 600 feet, and was heard at distances as great as 1000 yards as a "merged" noise. Croaker noise in the southern waters was found negligible except over mud bottoms, but was much louder off the Carolina and Virginia coasts. Croakers were found in water up to 100 feet in depth. Shrimp crackle in general exhibited a rising characteristic from 1 to 30 kc. A peak at 3 kc was sometimes observed. The croaker noise was found to be concentrated below 2 kc. Intensities of both shrimp crackle and croaker noise were at times sufficient to interfere seriously with supersonic and sonic listening. Some very low ambient noise levels were found in deep water. Measurements there showed no variation of level with depth. Insufficient data was collected to arrive at any conclusive relationship between noise and sea state.

PB L 81144. KENNARD, E. H. The effect of a pressure wave on a plate or diaphragm. (David W. Taylor Model Basin Rept 527). Mar 1944. .104 p. Price: Microfilm-$3.50 - Photostat-$11.00
A systematic study of the phenomena attending the impact of a pressure-wave upon a plate, usually a shock wave, is introduced by a discussion of the commonest case, followed by the treatment of a number of special topics: the various characteristic times that are involved; cavitation at the interface; the transition to non-compressive action; the effect of a baffle; formulas for the swing time and the deflection of a diaphragm; the factors determining damage; and the departure from Hooke's law in water. The formulas are applied with fair success to some test data from experiments conducted by the Bureau of Ships and the David Taylor Model Basin. Most of the mathematical treatment is set down in an appendix to the report. 32 figures are included.

PB L 81141. KENNARD, E. H. Radial motion of water surrounding a sphere of gas in relation to pressure waves. (David W. Taylor Model Basin Rept 517). Sep 1943. 45 p. Price: Microfilm-$2.00 - Photostat-$5.00
In the study of explosive pressure waves, the theory of a sphere of gas expanding or contracting under water is needed in two connections, in discussing the motion of the gas globe produced by the explosive itself, and in considering the effect of bubbles in the water upon the propagation of pressure waves. This report summarizes and in the appendix derives the main formulas concerned with the radial expansion and compression of spherical gas filled cavities in water. Charts and photographs are included.

PB L 81135. KENNARD, E. H. Report on underwater explosions. (David W. Taylor Model Basin Rept 480). Oct 1941. 51 p. Price: Microfilm-$2.25 - Photostat-$6.00
The purpose of this report is to collect in compact form what is known concerning certain practically important aspects of underwater explosions and their effects. After a few remarks concerning the role played by density changes in the motion of water, the typical sequence of events in an underwater explosion is sketched. Then the principal parts of the sequence are discussed in detail. For convenience of reference, the relevant parts of the theory of elastic waves in fluids are summarized in Appendix I. A bibliography of the most important publications on underwater explosive phenomena is given at the end of the report. Seventeen figures are included.

PB L 87223. MILLER, GEORGE A. Sensitivity to changes in the intensity of white noise and its relation to masking and loudness. (Harvard Univ Psycho-Acoustic Lab Psycho Navy Res Rept 28). Jul 1947. 11 p. Price: Microfilm-$1.25 - Photostat-$2.00.
Sensitivity to changes in the intensity of a random noise was determined over a wide range of intensities. The just detectable increment in the intensity of the noise is of the same order of magnitude as the just detectable increment in the intensity of pure tones. For intensities more than 30 db above the threshold of hearing for noise the size in decibels of the increment which can be heard 50 percent of the time is approximately constant (0.4db). When the results of the experiment are regarded as measures of the masking of a noise by the noise itself, it can be shown that functions which describe intensity discrimination also describe the masking by white noise of pure tones and of speech. It is argued, therefore, that the determination of differential sensitivity to intensity is a special case of the more general masking experiment. The loudness of the noise was also determined, and just noticeable differences are shown to be unequal in subjective magnitude. A just noticeable difference at a low intensity produces a much smaller change in the apparent loudness than does a just noticeable difference at a high intensity. Reprinted from the Journal of the Acoustical Society of America, July 1947.

PB L 85440. MIZUSHIMA, SANICHIRO and others. Raman effect, infrared absorption, dielectric constant, and electron diffraction in relation to internal rotation. n. d. 9 p. Price: Microfilm-$1.00 - Photostat-$1.00
This document is a report of research conducted at the Chemical Laboratory, Faculty of Science, Tokyo Imperial University. The relative intensities of Raman lines of 1,2-dichloroethane were determined in the gaseous state as well as in the liquid state. The results combined with those of the dipole measurement in the gaseous state made it possible to determine the equilibrium isomeric ratio of the trans and gauche molecules; and these results were in good agreement with those obtained from the absorption measurement of infra-red spectra. This ratio also explained satisfactorily the results of electron diffraction experiments made for the vapor of 1,2-dichloroe-

thane. The statistical entropy of dihalogenoethanes was calculated from molecular data and was compared with the third law entropy obtained from thermal measurement. The frequencies of torsional oscillation about the C-C bond as axis were determined by the difference method and were found to be in agreement with the lowest frequencies of the observed Raman spectra. In English.

PB L 87787. MUTŌ, YOSHIO. On the order-disorder translation in solids. Parts I, II. n. d. 16 p. Price: Microfilm-$1.25 - Photostat-$2.00
This document by Dr. Yoshio Muto, Maebashi Medical College, Maebashi, Japan, consists of two parts, both in English, recording in part I the results of the author's studies of the phenomena of order-disorder transition in crystals with equivalent sublattices when there are just the same numbers of A and B molecules; and in part II, order-disorder transition in crystals with variable numbers of molecules is considered. Part II is entitled: On the order-disorder transition in solids. Several charts and various mathematical formulas are included. (This document is not dated but has footnotes dated as late as 1943).

PB L 81235. NIPPON SŪGAKU BUTSURIGAKKAI (MATHEMATICS AND PHYSICS SOCIETY OF JAPAN), TOKYO IMPERIAL UNIVERSITY, comp. Journal, vol. 17, No. 3. Mar 1943. 95 p. Price: Microfilm-$3.25 - Photostat-$10.00
Text is in Japanese.

PB L 85544. PROUDFOOT, D. A. and HOFF, H. B. Ambient noise survey, Miami area. (First four cruises to Bahamas, Cay Sal Bank and East coast of Florida). (Columbia Univ Div of War Res Rept D46A/R470). Aug 1943. 36 p. Price: Microfilm-$1.75 - Photostat-$4.00
During the period from June 27 to August 9, 1943 the U. S. Navy Underwater Sound Laboratory engaged in a program of ambient noise measurements in the waters adjacent to Florida and the Bahama Islands. Its primary purpose was to obtain measurements of ambient noise levels important to mine warfare requirements of the Bureau of Ordnance and Naval Ordnance Laboratory and of interest to the Bureau of Ships, U. S. Army Coast Artillery Corps and the NDRC in connection with harbor defense problems. Tables, curves, and a chart are included. See also PB 85544-S.

PB L 81138. ROOP, W. P. The design of ship structure to resist underwater explosion. Nominal theory. (David W. Taylor Model Basin Rept 492). Aug 1943. 43 p. Price: Microfilm-$2.00 - Photostat-$5.00
A nominal theory of the pressure field of an underwater explosion and of its action on a target is given, based on the idea that if the charge is not too near the target the major influences on the destructive power of an explosive charge are the weight of the charge and the solid angle subtended at the charge by the target. The theory has been applied in the laboratory to the analysis of data from thin circular diaphragms attacked by small charges. The destructive energy available from given charges is evaluated, and the nature of corrections to be made in future extensions of this work is indicated. Tables, curves, sketches and a bibliography are included.

PB L 85915. SCHNURMANN, ROBERT. The size of gas bubbles in liquids. (David W. Taylor Model Basin Translation 110). Mar 1943. 18 p. Price: Microfilm-$1.25 - Photostat-$2.00
The size of gas bubbles forced through a filter into a liquid depends on the nature of the liquid and is independent of the character of the filter. The size of the bubble as a function of the viscosity of the liquid is shown for dielectric fluids, acids, bases, and salt solutions. The mechanism of macroscopic bubble formation is observed and considered. In electrolytic solutions the additional factor of the electrostatic interaction of the charged gas bubbles is added to the effect of viscosity. This interaction permits determination of the order of magnitude of the concentrations of reversal of solutions whose viscosity does not perceptibly exceed that of water. The experimental result permits interpretation of the scatterings obtained upon determination of the pore diameters of ceramic filters for various liquids by the air pressure method. Translated by F. A. Raven from an article in Zeitschrift für Physikalische Chemie, vol. 143, Sep. 1929.

PB L 87227. STEVENS, S. S. and others. Methods of measuring speech spectra. (Harvard Univ Psycho-Acoustic Lab Psycho Navy Res Rept 40). Sep 1947. 10 p. Price: Microfilm-$1.00 - Photostat-$1.00.
A comparison was made of several alternative methods and devices for analyzing speech in terms of its acoustic spectrum (a time average of the sound-pressure level per cycle vs. frequency). A general procedure, applicable to a wide variety of analyzing instruments, consists of a comparison made between a known acoustic spectrum and an unknown spectrum (speech). For maximum convenience, the known spectrum should be a "white noise" whose spectrum level is a constant number of decibels per cycle. This spectrum is used as a standard to provide an over-all calibration of the entire recording and analyzing system. In practice, the shape of the speech spectrum is obtained directly as the difference in decibels, in each pass band of the analyzer, between the level obtained for the white noise and the level obtained for the speech. In order to measure conveniently the spectrum of the noise used as the standard of reference, a graphic analyzer was devised as follows: A Hewlett-Packard wave analyzer, Type 300A, was modified to give access to the 20,000-cycle voltage at the input to the meter system. This voltage was used to drive either of two types of graphic recorders. Continuous analyses from 0 to 16,000 c.p.s. can be made with various constant band widths. The procedure of comparing a known with an unknown spectrum eliminates the necessity of calibrating separately the recording, reproducing, and analyzing equipment. In the analysis of speech, only the calibration of the microphone need be considered as a final correction to the data. This procedure also makes it possible to obtain accurate analyses despite the use of voice recording and reproducing equipment having unknown frequency characteristics. Although the choice of filter cut-off frequencies is arbitrary, it has been found most convenient to analyze speech by dividing it up into bands that stimulate equally wide regions on the basilar membrane. This is accomplished by choosing filter cut-offs at equal intervals along the mel scale of subjective pitch. Within the limits of observational error the same answer is obtained when speech is analyzed by any of three different measuring systems: (a) square-law integrator (audio spectrometer), (b) linear integrator, (c) R.C.A. noise meter and Esterline Angus graphic recorder. When, with any of these systems, a speech spectrum is determined as the difference in decibels between the two analyses—that for white noise and that for speech—the speech spectrum can be stated in terms of sound-pressure level per cycle averaged over each of the nominal pass bands of the filters. Very narrow pass bands (5c.p.s.) reveal details in the speech spectrum not disclosed by the wider filter bands. Reprinted from the Journal of the Acoustical Society of America, Sep 1947.

PB L 85562. STOWELL, ELBRIDGE Z. Critical compressive stress for curved sheet supported along all edges and elastically restrained against rotation along the unloaded edges. (Natl Advisory Committee for Aeronautics Rept L-691; N Bulletin 3107). Sep 1943. 11 p. Price: Microfilm-$1.25-Photostat-$2.00
A formula is given for the critical compressive stress for slightly curved sheet with equal elastic restraints against rotation along the unloaded edges. The theory of small deflections is used and the formula reduces to that given by Timoshenko for the case of simply-supported edges. For large curvatures, a modification of Rodshaw's formulas to include the effect of edge restraint is suggested.

PB L 87222. WIENER, FRANCIS M. Sound diffraction by rigid spheres and circular cylinders. (Harvard Univ Psycho-Acoustic Lab Psycho Navy Res Rept 25). May 1947. 8 p. Price: Microfilm-$1.00 - Photostat-$1.00.
The results of calculations of the pressure distribution on the surface of a stationary rigid sphere and a stationary rigid circular cylinder of infinite length, when exposed to a plane progressive sound wave, are compared with experiment. A small probe microphone was used to measure the sound pressures on the surface of the obstacles in a room essentially free from acoustic wall reflections under a variety of experimental conditions. The sound pressures p on the surface are conveniently expressed relative to the free-field pressure p_0 in the undisturbed incident wave. In the case of the sphere, reasonably good agreement was obtained between theory and experiment in the range of $1/3 < ka < 10$, where k is the wave number of the incident wave and a the radius of the obstacle. In particular, the existence of the "bright" spot diametrically opposite the point nearest the sound source was verified experimentally. This comparison of experiment with theory affords a valuable means of estimating the validity of the experimental procedure. In the case of the cylinder whose axis was oriented parallel to the wave front of the incident wave and whose length was chosen to equal its diameter, the pressures were measured for the most part in the median plane. There is a marked similarity between the results obtained for this finite cylinder and the results obtained for a sphere. The pressure at the point in the median plane farthest away from the source of sound ($\Theta = 180^\circ$) is substantially equal to the free-field pressure only for $ka < 5$. As the frequency is increased further, the sound pressure near $\Theta = 180^\circ$ drops rapidly up to the most likely beyond $ka = 10$ at an approximately constant rate, in decibels per frequency octave. A small microphone located on the surface of such a cylinder at $\Theta = 180^\circ$ will exhibit a low pass filter action with a cut-off at $k \approx 5$. Tables are furnished of the ratio p/p_0 computed for a rigid circular cylinder of infinite length. This ratio is tabulated in magnitude and phase in the range of $\frac{1}{2} \leq ka \leq 10$, for azimuths Θ varying from 0 to 180° in 10-degree steps. The results are very similar to the spherical case for Θ not exceeding about 150 degrees. There is only an insignificant trace of the bright spot at $\Theta = 180^\circ$. Reprinted from the Journal of the Acoustical Society of America, May 1947.

Nuclear

PB L 88124. EVANS, ROBLEY D. Radioactivity units and standards. Oct 1947. 12 p. Price: Microfilm-$1.25 - Photostat-$2.00
These standards were prepared for the use of the Subcommittee on Units in its report to the Committee on Nuclear Science of the National Research Council. The terms and values defined include: Electron volt; curie; rutherford; roentgen; gamma-ray intensity; "air-wall" r chambers; roentgen-equivalent-physical (rep); the n unit, for fast neutrons; and roentgen-per-hour-at-one-meter (rhm). Three tables are included. The paper is reprinted from Nucleonics, Oct. 1947, and is to appear in the new book, "Advances in medical physics," to be published by Academic Press, Inc., New York.

PB L 88123. TOMPKINS, PAUL C. and others. Handling of radioactive materials in the Experimental Biology Section. (Atomic Energy Commission MDDC Rept 377) Jan 1946. 47 p. Price: Microfilm-$2.00 - Photostat-$5.00
This paper describes some of the developments in the handling of radioactive materials which have resulted from two years' work in the "semi-hot" laboratory of the Experimental Biology Section at Oak Ridge. At first it was necessary to separate and purify fission products, but as purified radioactive isotopes became available, the operations were reduced to the withdrawal of aliquots of stock solutions and the preparation of these aliquots for use in the section. Since preparations were diversified, it was not feasible to develop a special apparatus for each preparation. The laboratory resembles a standard chemical laboratory except for a concrete hood and a concrete storage cave. Disadvantages in the design of the laboratory have been found by experience. The primary objective of the development program was to make it possible to do the necessary work without permitting overexposure to the operator. Surveys were made which indicated that it is never good practice to expose any part of the body to an unshielded beta source at anytime and that the usual working position of the hands (directly over the sample) was the worst possible place of approach. Many of the problems were solved by the development of special equipment. Individual close-fitting shields, special glassware, and manipulative equipment were designed, and Lucite or polystyrene replaced lead for most shielding purposes. Rules for work in the laboratory were developed. Tongs and clamps used in the laboratory include, besides common tongs and slightly modified tongs, specially designed beaker tongs, handling tongs, pipette wiping tongs, stopcock turner, tube holder, stirring rod holder, and clamp holder. A pantograph manipulator was designed which gave motion in three directions and to which could be attached pipettes or tongs. With a pipette inserted in the head of the manipulator, pipetting can be controlled from the control end of the pantograph. Storage equipment developed included a steel cylinder, a lead shield, and tongs for carrying the lead shield. Transparent plastic shields were developed for glassware such as volumetric flasks, graduated cylinders, and serum bottles. Special glassware used included a dispensing burette, a mixing cylinder assembly, and a Steng precipitator assembly. A shielded evaporator was designed. A Ce^{144}-Pr^{144} solution of activity greater than 100 mc was prepared, using much of the special equipment, with a negligible exposure to the operator. Photographs and drawings are included.

RUBBER AND RUBBER PRODUCTS

PB L 27836. EBERT and NIEMANN. Research on Buna rubber tires at Peters Union in Frankfurt/Main on September 24-27, 1928 and on October 5, 1928. (I. G. Farbenindustrie. Main Laboratory Report) (Frames 5973-5975 of FIAT Microfilm Reel 4 B) Oct 1928. 2 f. Price: Microfilm-$1.00 - Enlargement print-$1.50
In German.

PB L 27833. FIKENTSCHER. Viscometric studies on rubber. (I. G. Farbenindustrie. Main Laboratory Report) (Frames 5847-5878 of FIAT Microfilm Reel 4 B) Sep 1928. 17 f. Price: Microfilm-$1.00 - Enlargement print-$2.00
In German.

PB L 27849. TREPPENHAUER. Preparation of olefins and butadiene through pyrogenic cracking of mineral oils. (I. G. Farbenindustrie. Main Laboratory Report) (Frames 6170-6185 of FIAT Microfilm Reel 4 B) Jan 1929. 9 f. Price: Microfilm-$1.00 - Enlargement print-$1.50
In German.

PB L 27896. VALKO. A new abrasion-testing machine for vulcanized rubber. (I. G. Farbenindustrie. Main Laboratory Report) (Frames 7062-7067 of FIAT Microfilm Reel 4 B) Jun 1930. 3 f. Price: Microfilm-$1.00 - Enlargement print-$1.50
In German.

TEXTILES AND TEXTILE PRODUCTS

PB L 70347. ANORGANA G.M.B.H., GENDORF, GERMANY. Reports of the Textile Auxiliary Agents Commission. (FIAT Microfilm Reel C-18, Frames 19762-20665) (See also FIAT Microfilm Reel C-17, PB 70346, Vol. 8, P.663).

Textiles and Textile Products (contd)

1931 - 1944. 903 f. Price: Microfilm-$6.00 - Enlargement Print-$90.50.
This microfilm reel was prepared by FIAT in Germany. 114 individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfila for $6.00. Please include PB and frame numbers when ordering individual items. In German.

Frames	Title	Price.
19762-19775 PB L 70347	About physical measurements on textile auxiliary solvents. By Maier-Bode. Apr 4, 1935. In German.	$1.50
19776-19792 PB L 70347	Detergents. By Brodersen. Apr 9, 1935. In German.	2.00
19793-19795 PB L 70347	Production of ointments. Oct 4, 1935. In German.	1.50
19796 -19799 PB L 70347	Mercerizing agent similar to "Meserol GS". By Brodersen. Sep 30, 1935. In German.	1.50
19800-19804 PB L 70347	Detergents. Fatty acid polyglycerides. By Brodersen. Oct 7, 1935. In German.	1.50
19805 - 19809 PB L 70347	Detergents. By Behnke. Jan 22, 1936. In German.	1.50
19810 - 19819 PB L 70347	Experiments for dulling artificial silk. By Brodersen. Oct 12, 1936. In German.	1.50
19820-19837-I 19877-19884-II PB L 70347	Substantive textile auxiliary agents. By Brodersen. Oct 7, 1936. In German.	3.00
19838-19843 PB L 70347	Textile auxiliary agents. By Quaedvlieg. Oct 2, 1936. In German.	1.50
19844 - 19850 PB L 70347	Mercerizing agent. By Brodersen. Oct 2, 1936. In German.	1.50
19851 -19853 PB L 70347	Detergent manufacture. By Brodersen. Oct 2, 1936. In German.	1.50
19854-19862-I. 19869-19872-II PB L 70347	Chemical dressing agents. By Quaedvlieg. Apr 27, 1936. In German.	1.50
19863-19868-I 19873-19876-II 19885-19894-III PB L 70347	Water proofing process. By Brodersen. Jun 17, 1937. In German.	2.00
19895-19908 PB L 70347	Textile auxiliary agents. By Brodersen. Feb 24, 1938. In German.	1.50
19909-19915 PB L 70347	Careful sulphurization. By Brodersen. Feb 24, 1938. In German.	1.50
19916 - 19924 PB L 70347	Analysis of textile auxiliary agents. By Zabel. Jan 6, 1940. In German.	1.50
19925-19929 PB L 70347	Suppleness of textiles. By Zabel. Jan 6, 1940. In German.	1.50
19930-19935 PB L 70347	Adulteration of soap. By Hollmann. Apr 6, 1940. In German.	1.50
19936-19940 PB L 70347	Injury of the skin by "mesapon". By Brodersen. Feb 15, 1941. In German.	1.50
19941-19943 PB L 70347	Sizing paste. By Brodersen. Feb 15, 1941. In German.	1.50
19944 - 19947 PB L 70347	Experiments for continuous production of "Mersol". By Weissenborn. Feb 15, 1941. In German.	1.50
19948-19953 PB L 70347	Soaps and washing powders with "Mesapon N". By Hail. Feb 15, 1941. In German.	1.50
19954-19959 PB L 70347	Reflection of dyed textile materials. By Fuchs. Feb 15, 1941. In German.	1.50
19960-19966 PB L 70347	"Mersolates". By Brodersen. Nov 27, 1941. In German.	1.50
19967-19969 PB L 70347	Emulsifiers. By Brodersen. Nov 27, 1941. In German.	1.50
19970-19973 PB L 70347	Scouring agents. By Brodersen. Nov 27, 1941. In German.	1.50
19974-19982 PB L 70347	Detergents. Feb 15, 1943. In German.	1.50
19983-19985 PB L 70347	Emulsifier. By Brodersen. Jan 29, 1943. In German.	1.50
19986-20009 PB L 70347	Olefine polymerization. By Michel. Sep 26, 1934. In German.	2.50
20010-20013 PB L 70347	Synthesis of alkyl succinic acid. Nov 6, 1935. In German.	1.50
20014-20024 PB L 70347	Detergents. Jan 29, 1936. In German.	1.50
20025-20032 PB L 70347	Olefine Polymers as detergents. Jan 29, 1936. In German.	1.50
20033-20038 PB L 70347	Unsaturated ketones. In German.	1.50
20039-20046 PB L 70347	Inner ammonium salt. In German.	1.50
20047-20060 PB L 70347	Hydrophobic agents. Jun 28, 1937. In German.	1.50
20061-20063 PB L 70347	Detergents. Jun 15, 1937. In German.	1.50
20064-20066 PB L 70347	Inner ammonium salts. Jun 14, 1937. In German.	1.50
20067-20069 PB L 70347	Amines and amides. Jun 28, 1937. In German.	1.50
20070-20072 PB L 70347	Textile auxiliary agents. Jun 28, 1937. In German.	1.50
20073-20074 PB L 70347	Textile auxiliary agents. Jun 14, 1937. In German.	1.50
20075-20078-I 20088-20095-II PB L 70347	Benzyl- and nenaphthylchlorides. Jun 14, 1937. In German.	1.50
20079-20085 PB L 70347	Salicylic acid derivates. Jun 14, 1937. In German.	1.50
20086-20087 PB L 70347	Textile auxiliary agents. Feb 16, 1938. In German.	1.50
20096-20102 PB L 70347	Substituted phenols. By Pinkernelle. Mar 21, 1941. In German.	1.50
20103-20108 PB L 70347	Isocyanic acid ester. By Strohmenger. Mar 21, 1941. In German.	1.50
20109-20113 PB L 70347	Lacquers. By Kneip. Mar 21, 1941. In German.	1.50

20114-20120 PB L 70347 — Sizing pastes. By Pinkernelle. Nov 27, 1941. In German. 1.50

20121-20124 PB L 70347 — Leather greases. By Pinkernelle. Jan 27, 1943. In German. 1.50

20125-20129 PB L 70347 — Gum-Lacs. By Binapfl. Feb 5, 1943. In German. 1.50

20130-20132 PB L 70347 — Leather greases. By Pinkernelle. Feb 8, 1943. In German. 1.50

20133-20138 PB L 70347 — Detergents. Feb 10, 1940. In German. 1.50

20139-20144 PB L 70347 — Wetting agents. Sep 29, 1931. In German. 1.50

20145-20153 PB L 70347 — Substantive dyeings. Apr 1, 1933. In German. 1.50

20154-20159 PB L 70347 — Wetting agents. Apr 1, 1933. In German. 1.50

20160-20163 PB L 70347 — Synthesis of amines. Apr 1, 1933. In German. 1.50

20164-20180 PB L 70347 — Substantive dyeings. Jul 7, 1933. In German. 2.00

20181-20187 PB L 70347 — Finishing agents. Nov 21, 1933. In German. 1.50

20188-20191 PB L 70347 — "Fixanol". Nov 21, 1933. In German. 1.50

20192-20195 PB L 70347 — Textile auxiliary agents. May 17, 1934. In German. 1.50

20196-20198 PB L 70347 — Sulphonation of fatty acids. May 17, 1934. In German. 1.50

20199-20200 PB L 70347 — Wetting agents. May 17, 1934. In German. 1.50

20201-20203 PB L 70347 — "Sapamine KW". May 17, 1934. In German. 1.50

20204-20222 PB L 70347 — Substantive dyeings. Jan 11, 1935. In German. 2.00

20223-20229 PB L 70347 — Textile auxiliary agents. Apr 9, 1935. In German. 1.50

20230-20234 PB L 70347 — Detergents. Oct 17, 1938. In German. 1.50

20235-20243 PB L 70347 — Crease proof fabrics. Oct 17, 1935. In German. 1.50

20244-20248 PB L 70347 — Animalization of fibers. Nov 6, 1935. In German. 1.50

20249-20254 PB L 70347 — Dulling. Oct 17, 1935. In German. 1.50

20255-20260 PB L 70347 — Mercerizing agents. Oct 15, 1936. In German. 1.50

20261-20274 PB L 70347 — Water softening agents. Oct 15, 1936. In German. 1.50

20275-20278 PB L 70347 — Phosphoricimino acids. Oct 15, 1936. In German. 1.50

20279-20289 PB L 70347 — "Solidogen B". Oct 15, 1936. In German. 1.50

20290-20292-I, 20313-20326-II PB L 70347 — Animalization. Jun 16, 1937. In German. 2.00

20293-20294 PB L 70347 — Crease resistance. Jun 16, 1937. In German. 1.50

20295-20306 PB L 70347 — Water softening. Jun 16, 1937. In German. 1.50

20307-20312 PB L 70347 — Determination of the structures of celluloses. By Rein. n.d. In German. 1.50

20327-20332 PB L 70347 — Wetting agents. By Muens. Feb. 24, 1938. In German. 1.50

20333-20335 PB L 70347 — Solidogen manufacture. By Troesken. Feb 24, 1938. In German. 1.50

20336-20344 PB L 70347 — Finishing agents. By Keller. Feb 17, 1940. In German. 1.50

20345-20347 PB L 70347 — "Katanol". Feb 17, 1940. In German. 1.50

20348-20351 PB L 70347 — "Katanol". Mar 21, 1940. In German. 1.50

20352-20357 PB L 70347 — Use of "Trilon". By Paessler. Mar 21, 1941. In German. 1.50

20358-20361 PB L 70347 — Sulpho succinic acid ester. By Troesken. Nov 29, 1941. In German. 1.50

20362-20366 PB L 70347 — Products of formaldehyde condensation with guanyl compounds. By Cofferge. Dec 29, 1941. In German. 1.50

20367-20368 PB L 70347 — Benzyl alcohols. By troesken. Feb 13, 1943. In German. 1.50

20369-20370 PB L 70347 — Levelling agents. By Honold. Apr 21, 1944. In German. 1.50

20371-20372 PB L 70347 — "Solidogen". By Honold. Apr 21, 1944. In German. 1.50

20373-20374 PB L 70347 — Textile auxiliary agents. By Ritter. Apr 21, 1944. In German. 1.50

20375-20382 PB L 70347 — Textile auxiliary agents from lignite oils. By Langheinrich. Jan 25, 1934. In German. 1.50

20383-20385 PB L 70347 — Textile auxiliary agent from lignites. Oct 17, 1935. In German. Will reproduce poorly. 1.50

20386-20393 PB L 70347 — Report about reactions. Oct 17, 1935. In German. 1.50

20394-20397 PB L 70347 — Catalysis of fatty compounds. Oct 17, 1935. In German. 1.50

20398-20411 PB L 70347 — Production of alcohols and ketones. By Loewenberg. Apr 1936. In German. 1.50

20412-20415 PB L 70347 — Catalytic amines. Oct 14, 1936. In German. 1.50

20416-20426 PB L 70347 — Polymerization. By Wiedemann. Jun 1937. In German. 1.50

20427-20464 PB L 70347 — Chlorination of hydrocarbons. By Sineykal. Jan 20, 1938. In German. 4.00

20465-20474 PB L 70347 — Hexadecanesulphate and sulphonates. By Asinger. Feb 1941. In German. 1.50

20475-20484 PB L 70347 — Production of "Mepasinsulphonic" acid. By Asinger. Feb 1941. In German. 1.50

20485-20493 PB L 70347 — Description of "Mersol" extraction equipment. By Schmitt. Mar 1941. In German. 1.50

20494-20499 PB L 70347 — Report of an experiment with "Lapasin". By Smeykal. Mar 1941. In German. 1.50

20500-20506 PB L 70347 — Effect of sulphochlorination on "Lapasin sulphonate". By Asinger. Mar 1941. In German. 1.50

20507-20511 PB L 70347 — Investigation of the sulfochlorination of isobutane. By Asinger. Nov 1941. In German. 1.50

20512-20517 PB L 70347 — Report on the constitution of "Lapasin sulphonates". By Asinger. Nov 1941. In German. 1.50

20518-20524 PB L 70347 — Determination of mono and disulfo chlorides in hydrocarbon sulfochlorides. By Asinger. Nov 1941. In German. 1.50

20525-20528 PB L 70347 — Sulfochlorination under exclusion of light. By Asinger. Nov 1941. In German. 1.50

20529-20530 PB L 70347 — About the effect of Cl_2 and Br_2 on unsaturated hydrocarbons. By Asinger. Feb 1943. In German. 1.50

20531-20534 PB L 70347 — Sultones and sultames. By Asinger. Feb 1943. In German. 1.50

20535-20537 PB L 70347 — Dark dyeing of mineral oil sulphonates. By Asinger. Feb 1943. In German. 1.50

20538-20541 PB L 70347 — About cyclocohols. By Asinger. Feb 1943. In German. 1.50

20542-20550 PB L 70347 — Cyclocohols from mineral oil. By Cernassmer. Feb 1943. In German. 1.50

20551-20557 PB L 70347 — Synthesis of "Synol". By Reisinger. Feb 1943. In German. 1.50

20558-20567 PB L 70347 — Nitro alkyl sulphates. By Asinger. Dec 1943. In German. 1.50

20568-20590 PB L 70347 — Examination of monosulphonates. Apr 1944. In German. 2.50

20591-20603 PB L 70347 — Analysis of n-hexadecanesulphonates. By Asinger. Apr 1944. In German. 1.50

20604-20612 PB L 70347 — Capability of reaction of higher Alkylhalide. By Asinger. Apr 1944. In German. 1.50

20613-20619 PB L 70347 — Dehydration of higher, primary and secondary alpha linked alkyl alcohols. By Asinger. Apr 1944. In German. 1.50

20620-20653 PB L 70347 — Olefinic products of carbon monoxide hydration. Apr 1944. In German. 3.50

20654-20665 PB L 70347 — Salts of dicarboxylic acid esters. By Eckoldt. Apr 1944. In German. 1.50

PB L 70347-S. ANORGANA G.M.B.H., GENDORF, GERMANY. Reports of the Textile Auxiliary Agents Commission. (FIAT Microfilm Reel C-18, Frames 19762-20665, abstract cards). 1931-1944. 114 p. Price: Microfilm-$3.00 - Photostat-$8.00.

These are abstract cards of the individual items on the above microfilm reel C 18, PB 70347, prepared by FIAT personnel in Germany.

PB L 70054. I.G. FARBENINDUSTRIE A.G., BOBINGEN, GERMANY. Textile technology. (FIAT Microfilm Reel D 13, frames 1 - 954). 1935-1945. 953 f. Price: Microfilm-$6.00 - Enlargement Print-$95.50.
This microfilm reel was prepared by FIAT personnel in Germany. 42 individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $6.00. Please include PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
1 - 122 PB L 70054	Rayon. Jan 15, 1945. In German.	$12.50
122a - 126 PB L 70054	Rayon knit goods and finished articles manufactured from it. Oct 1940. In German.	1.50
127 - 133 PB L 70054	Recovery of carbon disulfide. By Stoll. Aug 4, 1943. In German.	1.50
134 - 135 PB L 70054	Production of low-alkali viscoses. By Stoll. May 6, 1943. In German.	1.50
136 - 137 PB L 70054	Low-alkali viscoses. By Stoll. Feb 25, 1943. In German.	1.50
138 - 525 PB L 70054	Dye formulae for Rottweil rayon. 1939-1944. In German.	39.00
526 - 535 PB L 70054	Dyeing experiments with the hank or balling machine. Nov 7, 1940, Aug 9, 1941. In German.	1.50
536 - 551 PB L 70054	Rayon dyeing on the dyeing machine. By Stoehrel. Mar 22, 1938. In German.	2.00
552 - 557 PB L 70054	Experiments to dye twist balls. By Stoehrel. Sep 19, 1936. In German.	1.50
558 - 561 PB L 70054	Ball and hank dyeing processes. By Diehm. n.d. In German.	1.50
562 - 564 PB L 70054	Process for dyeing balled rayon. By Diehm. Oct 12, 1936. In German.	1.50
565 - 571 PB L 70054	After stretching of cord rayon. By Stoehrel. Feb 26, 1943. In German.	1.50
572 - 576 PB L 70054	Previous production of cord. By Stoll. Feb 27, 1943. In German.	1.50
577 - 579 PB L 70054	Credit advance for a cord plant. By Stauffer. Feb 27, 1943. In German.	1.50
580 - 581 PB L 70054	Liter weight determination for alkali cellulose. Feb 7, 1944. In German.	1.50
582 - 591 PB L 70054	What is the importance of the filter? By A. Matthes. Sep 30, 1943. In German.	1.50
592 - 595 PB L 70054	Previous production of cord. (Same as 572-576). By Stoll. Feb 27, 1943. In German.	1.50
596 PB L 70054	Viscose. By A. Siehr and Krefeld. Mar 8, 1940. In German.	1.50

597 PB L 70054 "Lamitol"-sizing agent. Nov 29, 1941. In German. 1.50

598 - 603 PB L 70054 "Cord 165". By Jehle. Nov 19, 1941. In German. 2.00

604 - 613 PB L 70054 Filter method for solutions and its application in industry. By Johannes. Mar 25, 1937. In German. 1.50

614 - 656 PB L 70054 Ripening process in viscose. By Matthes. Jan 23, 1935. In German. 4.50

657 - 679 PB L 70054 Continuous grinding of alkali-cellulose. By Weiss. Feb 12, 1937. In German. 2.50

680 - 720 PB L 70054 Solubility and stability of spun rayons in alkalis. By A. Matthes. Oct 26, 1936. In German. 4.50

721 - 744 PB L 70054 Hairiness and loop formation in rayon. By Dannenberg. Dec 11, 1936. In German. 2.50

745 - 757 PB L 70054 Dissolving viscose in various dissolving apparatuses. By Stauffer. Oct 20, 1936. In German. 1.50

758 - 760 PB L 70054 Spinning experiments with viscoses of different degrees of maturity. By Knapp. May 23, 1936. In German. 1.50

761 - 766 PB L 70054 The sticky contaminations in the hydrogen peroxide bath of the bleachery. By Demus. Feb 27, 1935. In German. 1.50

767 - 772 PB L 70054 Rayon spinning for cord yarns. By Spencker. Jan 11, 1937. In German. 1.50

773 - 814 PB L 70054 Aftertreatment of rayon cake. Mar 26, 1936. In German. 4.50

815 - 835 PB L 70054 Using "Feldmuehle Rohrschach" flap bobbins for spinning "Suprema" rayon. By Lutze. Jan 25, 1937. In German. 2.50

836 - 844 PB L 70054 Examination of cord rayon N 74 (Rottweil). By Jehle. Mar 24, 1937. In German. 1.50

845 - 854 PB L 70054 Continuous testing of extensive thread lengths. By Dannenberg. Feb 20, 1936. In German. 1.50

855 - 870 PB L 70054 Sulfite consumption in desulfurizing baths. By Demus. Jun 18, 1937. In German. 2.00

871 - 900 PB L 70054 The effect of various electrolytes on the precipitation process. By Goldschmidt. May 2, 1939. In German. 3.00

901 - 907 PB L 70054 Gas desulfurizing I. By Demus. Nov 18, 1942. In German. 1.50

908 - 917 PB L 70054 Gas desulfurizing II. By Demus. Jan 30, 1943. In German. 1.50

918 - 922 PB L 70054 Gas desulfurizing III. By Demus. Apr 8, 1943. In German. 1.50

923 - 938 PB L 70054 Gas desulfurizing IV. By Demus. Jun 29, 1943. In German. 2.00

939 - 947 PB L 70054 Gas desulfurizing V. By Demus. Oct 21, 1943. In German. 1.50

948 - 954 PB L 70054 Rapid colorimetric determination of hydrogen sulfide and carbon disulfide in waste gases. (Gas desulfurizing VI). By Demus. Dec 18, 1943. In German. 1.50

PB L 70054-S. I.G. FARBENINDUSTRIE A.G., BOBINGEN, GERMANY. Textile technology. (FIAT Microfilm Reel D 13, Frames 1-954, abstract cards). 1935 - 1945. 41 p. Price: Microfilm-$1.00 - Photostat-$3.00. These are abstract cards giving brief abstracts of the individual items on the above FIAT microfilm reel, D 13, PB 70054, prepared by FIAT investigators in Germany.

PB L 86030. RAIBLE, J. Spindle dynamics. Nov 1946. 14 p. Price: Mimeo-$0.75
The function of a textile spindle is peculiar to itself, and in some degree it is a difficult function. A survey is given here of some properties, chiefly dynamic, acquaintance with which may be helpful in evaluating spindle problems. Special reference is made to the existence of load irregularities in rotating masses in connection with the following considerations: Rotation around a free axis; rigidly mounted material axles; vibration; critical speed; rigid and flexible spindles; gyroscopic motion; stresses and spindle motion; and damping oscillations. This translation by Julian P. Smith is of a German publication SP 143, dated January 1936.

PB L 81876. TRUSLOW, JAMES L. Viscose and cuprammonium machinery in Germany and Austria: A photographic record. Summer 1946. 8 p. Price: Microfilm-$1.00 - Photostat-$1.00
This report lists a collection of 189 photographs of viscose and cuprammonium machinery in manufacturing plants in Germany and Austria. In order to show important details of construction, some of the machines were partially dismantled and the parts photographed. Pending the publication of the comprehensive reports of the investigators, the photographs will provide the industry with information about European practices and significant developments. A set of the original prints of the photographs can be inspected in the Textiles Section, National Bureau of Standards, Washington, D. C.

PB L 86251. WILLIAMSON, WILLIAM B. Survey of various manufacturing methods in use by worsted industry for production of cloth, serge, O. D. (QM Textile Series Rept 27) Feb 1947. 56 p. Price: Mimeo-$1.75
This document reports an analysis of procedures and techniques used by manufacturers producing O.D. 18 ounce worsted serge for the Quartermaster Corps during part of the war period. It was designed to define the causative factors in the deviation from specifications of delivery from individual, as well as between different sources of supply. Processes in fourteen manufacturing steps were studied in detail at forty-three mills. Three basic factors which exist in the worsted industry preclude the drawing of any specific conclusions or the recommending of certain procedures or methods as preferable to others. They are: (1) Plant equipment and machinery is not standard in the industry; (2) Certain mills are completely integrated and others partially so; and (3) The geographical location of a mill is an important influence in the processing of textile fabrics. A few general conclusions are stated on: (1) dyeing and blending; (2) weaving; (3) brushing and shearing before fulling; (4) fulling; (5) effect of temperature on shade; (6) shrinkage in length and pull-out; and (7) cloth widths. Recommendations for further research are made, and a supplemental survey is outlined of manufacturing methods for: (1) cloth, shirting, flannel, O.D., 10½ ounce; (2) cloth, serge, O.D., 10½ ounce; and (3) cloth, elastique, 18 ounce.

ELECTRICAL MACHINERY, EQUIPMENT, AND SUPPLIES

PB L 85425. WENNER, EBERHARD. Invisible light barrage with picture transformer as detection device. (German patent application) Apr 1941. 6 p. Price: Microfilm-$1.00 - Photostat-$1.00
This is a translation by G. F. Bonardi of a German patent application dated April 19, 1941, utilising the light of a projector, reflected if desired by a low loss reflector (triple mirror), to illuminate the photocathode of the picture transformer, with an arrangement of one or more diaphragms so as to prevent direct light from falling in the picture transformer. This application bears the number PA 297990, April 22, 1941.

PB L 85426. GEYER, KARLHEINZ. A method for the preparation of two-sided mosaic screens. (German patent application) Nov 1939. 6 p. Price: Microfilm-$1.00 - Photostat-$1.00
This is a translation by G. F. Bonardi of a German patent application dated November 24, 1939, concerning a method for the preparation of screens for picture transmission for a two-sided electron beam picture scanner, an electron beam picture transformer scanner, and electronic storage devices.

PB L 83232. REICHSPATENTAMT, BERLIN. German patent applications for electric meters. (FIAT Microfilm Reel F 93, Frames 5299-6308) 1938-1945. 1009 f. Price: Microfilm-$7.00 - Enlargement print-$102.00
This reel of 166 applications was prepared by FIAT investigators in Germany. Individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $7.00. Please include PB and frame numbers when ordering individual items. In German.

Frames	Title	Price
5299-5308 PB L 83232	SCHOELLER & CO., FRANKFURT/MAIN. Unipolar moving coil measuring instrument. Ger. patent application Sch 123 080 dated Aug 18, 1941. In German.	$2.00
5309-5314 PB L 83232	ZEISS-IKON A.G., DRESDEN. Method to measure the relative width of parts of periodic functions. Ger. patent application Z 26 886 dated Feb 7, 1942. In German.	2.00
5315-5334 PB L 83232	SCHUBERT, E. (Inventor). Electric tolerance measurements. Ger. patent application Sch 128 474 dated Oct 13, 1941. In German.	3.00
5335-5340 PB L 83232	SCHOELLER & CO., FRANKFURT/MAIN. Slide-wire compensator without standard cell with unipolar moving coil instrument as zero indicator and voltmeter for the auxiliary current. Ger. patent application Sch 123 672 dated Nov 25, 1941. In German.	2.00
5341-5345 PB L 83232	NORDDEUTSCHE SEEKABELWERKE, NORDENHAM. Measuring circuit for continuous control of electric cables, especially marine cables, and cable testing instrument. Ger. patent application N 47 341/21c, n.d. In German.	2.00
5346-5348 PB L 83232	NORMA G.M.B.H., WIEN. Direct current moving magnet system. Ger. patent application N 45 753 dated May 15, 1943. In German.	2.00
5349-5350 PB L 83232	NORMA G.M.B.H., WIEN. Electrical indicating instrument with circular scale, adjustable from outside, and with stationary index mark. Ger. patent application N 46 754 dated May 15, 1943. In German.	2.00
5351-5354 PB L 83232	STEINBACH (Inventor). Instrument for amplification, measurement, regulation or the like. Ger. patent application St 112 811/21a, n.d. In German.	2.00
5355-5357 PB L 83232	SIEMENS & HALSKE, BERLIN. Micro-oscillograph with circular time coordinate. Ger. patent application S 158 251 VIII/21e dated Dec 8, 1943. In German.	2.00
5358-5363 PB L 83232	SIEMENS & HALSKE, BERLIN. Tube-voltmeter. Ger. patent application S 156 878/21e dated Aug 12, 1943. In German.	2.00
5364-5369 PB L 83232	Method of illustrating characteristic curves. Ger. patent application V 39 434 dated Nov 27, 1942. In German. Addition to patent application V 37.991/VIIId 21e.	2.00
5370-5374 PB L 83232	SIEMENS & HALSKE, BERLIN. Capacitive voltage transformer. Ger. patent application S 152 711 dated Oct 23, 1942. In German.	2.00
5375-5380 PB L 83232	SIEMENS & HALSKE, BERLIN. Induction-type meter. Ger. patent application S 142 328 VIIId/21e dated Sep 19, 1940. In German.	2.00
5381-5385 PB L 83232	SIEMENS & HALSKE, BERLIN. Tube-voltmeter. Ger. patent application S 158 551 VIIId/21e dated Jan 21, 1944. In German.	2.00
5386-5390 PB L 83232	SIEMENS-SCHUCKERT-WERKE, BERLIN. Arrangement to detect defects in the insulating layer which surrounds the metallic pressure protection cover of electric cables. Ger. patent application S 159 672 VIIId/21e dated May 12, 1944. In German.	2.00
5391-5395 PB L 83232	SIEMENS & HALSKE, BERLIN. Electric moving-magnet measuring instrument. Ger. patent application S 159 681 VIIId/21e dated May 10, 1944. In German.	2.00
5396-5403 PB L 83232	TELEFUNKEN G.M.B.H., BERLIN-ZEHLENDORF. Power meter for oscillations of very high frequency. Ger. patent application T 60 219 VIIId/21e dated Mar 15, 1944. In German.	2.00
5404-5408 PB L 83232	STOTZ-APPARATEBAU, EBERBACH. Alternating current measuring instrument. Ger. patent application St 63 685/21e dated Nov 25, 1943. In German. Addition to patent application St 61 711 VIIId/21e.	2.00
5409-5416 PB L 83232	SIEMENS-SCHUCKERT-WERKE, BERLIN. Arrangement to measure the field intensity of a high frequency condenser field or coil field. Ger. patent application S 152 288 dated Sep 28, 1942. In German.	2.00
5417-5420 PB L 83232	SIEMENS & HALSKE, BERLIN. Arrangement to measure weak direct currents. Ger. patent application S 152 290 dated Sep 30, 1942. In German. Addition to patent application	2.00

S 147 419 VIIId/21e.

5421-5428 PB L 83232 SCHOELLER & CO., FRANKFURT/MAIN. Unipolar moving-coil instrument with magnet from pressed material and a 270° scale. Ger. patent application Sch 123 671 dated Nov 25, 1941. In German. 2.00

5429-5436 PB L 83232 Method for electric differentiation. Ger. patent application T 57 532 dated Jun 8, 1942. In German. 2.00

5437-5439 PB L 83232 SIEMENS-SCHUCKERT-WERKE, BERLIN. Insulation for electric machines, coils, windings, conductors, or the like. Ger. patent application S 147 399 dated Oct 24, 1941. In German. 2.00

5440-5442 PB L 83232 ZINKE, MÖHRING, and OTTE (Inventors). Electric measuring instrument for wide frequency range. Ger. patent application Z 25 435 dated Aug 11, 1938. In German. 2.00

5443-5467 PB L 83232 Recorder of characteristic curves. Ger. patent application V 37 991 dated Aug 25, 1941. In German. 4.00

5468-5471 PB L 83232 TELEFUNKEN G.M.B.H., BERLIN-ZEHLENDORF. Measuring instrument for ultra-short waves. Ger. patent application T 58 375 dated Dec 4, 1942. In German. 2.00

5472-5478 PB L 83232 TELEFUNKEN G.M.B.H., BERLIN-ZEHLENDORF. Arrangement to measure the power of micro-waves. Ger. patent application T 56 605 dated Dec 9, 1941. In German. 2.00

5479-5480 PB L 83232 TELEFUNKEN G.M.B.H., BERLIN-ZEHLENDORF. Cathode ray oscillograph. Ger. patent application T 56 348 dated Oct 20, 1941. In German. 2.00
Addition to patent application T 53 129 VIIId/21e.

5481-5489 PB L 83232 PROBST, K. (Inventor). Direct reading frequency measuring instrument, especially for high frequency. Ger. patent application P 83 963 dated Sep 2, 1941. In German. 2.00

5490-5495 PB L 83232 GOSSEN & CO. Thermocouple converter, with slight frequency error. Ger. patent application G 106 501 dated Nov 20, 1942. In German. 2.00

5496-5499 PB L 83232 Arrangement to measure the field intensity of very high frequencies. Ger. patent application F 945 071/21e dated Oct 27, 1943. In German. 2.00

5500-5502 PB L 83232 Parallel connection of electric potentiometers with bridge-connection branches. Ger. patent application not dated. In German. 2.00

5503-5510 PB L 83232 MIX & GENEST A.G., BERLIN-SCHÖNEBERG. Method for blocking a transmission device. Ger. patent application M 154 600 dated Jun 25, 1942. In German. 2.00

5511-5515 PB L 83232 METRA WATT A.G., NÜRNBERG-O. Transformer with secondary resonance. Ger. patent application M 154 764 dated Jul 11, 1942. In German. 2.00

5516-5520 PB L 83232 METRA WATT A.G., NÜRNBERG-O. Transformer with adjustable iron-core. Ger. patent application M 154 765 dated Jul 11, 1942. In German. 2.00

5521-5525 PB L 83232 MIDHAT, S. (Inventor). Electromagnetic adjusting device, especially for measuring instruments. Ger. patent application M 153 199/21e dated Feb 3, 1942. In German. 2.00

5526-5531 PB L 83232 GOSSEN & CO., ERLANGEN. Thermocouple converter with increased safety against over-currents. Ger. patent application G 101 630 dated Apr 23, 1940. In German. 2.00

5532-5538 PB L 83232 GOSSEN & CO., ERLANGEN. Pole shoe body for 270° moving-coil instrument with permanent-magnet of square shape. Ger. patent application G 106 397 dated Nov 6, 1942. In German. 2.00

5539-5541 PB L 83232 LICENTIA G.M.B.H., BERLIN. Electron ray oscillograph. Ger. patent application L 114 814 VIIId/21e dated Jun 20, 1944. In German. 2.00

5542-5545 PB L 83232 P. GOSSEN & CO., ERLANGEN. Direct reading frequency-meter with two resonance circuits. Ger. patent application G 107 071 dated Feb 20, 1941. In German. 2.00

5546-5552 PB L 83232 HERDEL, K. (Inventor). Arrangement to prevent overloading of fluorescence layers with large ray currents in cathode ray oscillographs. Ger. patent application H 165 818 VIIId/21e dated Jul 10, 1941. In German. 2.00

5553-5557 PB L 83232 KOCH & STERZEL, DRESDEN. Device to test the number of turns of coils, especially of instrument transformer coils. Ger. patent application K 170 115/21e dated Nov 9, 1943. In German. 2.00

5558-5560 PB L 83232 Arrangement to measure impedances at high frequencies. Ger. patent application K 171 468 VIIId/21e dated May 8, 1944. In German. 2.00

5561-5564 PB L 83232 KLANGFILM G.M.B.H., BERLIN. Coupling of photo-cells to an amplifier. Ger. patent application K 171 742 dated Jun 28, 1944. In German. 2.00

5565-5568 PB L 83232 Direct reading impedance measuring instrument with wide frequency range. Ger. patent application K 171 566 dated May 20, 1940. In German. 2.00

5569-5579 PB L 83232 SIEMENS & HALSKE, BERLIN. Measuring device for small direct currents. Ger. patent application S 147 419 dated Oct 25, 1941. In German. 3.00

5580-5583 PB L 83232 SIEMENS & HALSKE, BERLIN. Connection for tube-amplifiers for alternating current values for use in the technique of measuring and regulating. Ger. patent application S 162 221 VIIId/21e dated Jun 21, 1945. In German. 2.00
Addition to patent application S 156 476.

5584-5589 PB L 83232 SIEMENS & HALSKE, BERLIN. Method and device to control the uniformity of a thin metal coating continuously deposited on an extended body of insulating material. Ger. patent application S 158 200/21e dated Dec 8, 1943. In German. 2.00

5590-5596 PB L 83232 SIEMENS & HALSKE, BERLIN. Damping device for measuring instruments. Ger. patent application S 155 617 dated May 29, 1943. In German. 2.00

5597-5602 PB L 83232 — N.V. PHILIPS, EINDHOVEN, HOLLAND. Device for the mechanical registration of electric alternating currents of audio-frequency. Ger. patent application N 47 534 VIIId/42g dated Mar 14, 1945. In German. 2.00

5603-5608 PB L 83232 — OHRT, P. (Inventor). Arrangement to actuate measuring instruments depending on electric values. Ger. patent application N 158 096 dated Jun 24, 1943. In German. 2.00

5609-5612 PB L 83232 — MAUSERWERKE, OBERNDORF/NECKAR. Measuring method with registering instruments. Ger. patent application N 158 061/21e dated Jul 6, 1943. In German. 2.00

5613-5619 PB L 83232 — SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Device to determine the average load curves for electrical installations. Ger. patent application S 133 411 VIIId/21e dated Feb 1, 1940. In German. 2.00

5620-5622 PB L 83232 — SIEMENS & HALSKE, BERLIN. Device for the integration of smallest electric currents or voltages. Ger. patent application S 157 777/21e dated Oct 30, 1943. In German. 2.00

5623-5629 PB L 83232 — SIEMENS & HALSKE, BERLIN. Instrument for direct current measurements with a moving magnet. Ger. patent application S 155 501 dated May 8, 1943. In German. 2.00

5630-5636 PB L 83232 — SIEMENS & HALSKE, BERLIN. Electric measuring system with permanent moving magnet. Ger. patent application S 155 500 dated May 8, 1943. In German. 2.00

5637-5640 PB L 83232 — SIEMENS-SCHUCKERTWERKE, BERLIN. Device and method to measure polyphase currents, especially three-phase currents. Ger. patent application S 153 713/21e dated Jan 13, 1943. In German. 2.00

5641-5643 PB L 83232 — SIEMENS-SCHUCKERTWERKE, BERLIN. Electric installation with a tariff-connection. Ger. patent application S 147 397 dated Oct 14, 1941. In German. 2.00

5644-5647 PB L 83232 — SIEMENS & HALSKE, BERLIN. Connection to increase the efficiency of instrument transformers with constant load. Ger. patent application S 152 759 dated Nov 6, 1942. In German. 2.00

5648-5650 PB L 83232 — SIEMENS-SCHUCKERTWERKE, BERLIN. Device to actuate D.C.-controlled electric instruments depending on the effective value of an alternating voltage. Ger. patent application S 151 460 dated Jul 29, 1942. In German. 2.00

5651-5656 PB L 83232 — MIX & GENEST A.G., BERLIN-SCHÖNEBERG. Instrument to test short circuits of windings. Ger. patent application M 148 573 dated Sep 3, 1940. In German. 2.00

5657-5663 PB L 83232 — STOLZ-APPARATEBAU G.M.B.H., EBERBACH. Alternating current measuring instrument. Ger. patent application St 61 711 VIIId/21e dated Apr 4, 1942. In German. 2.00

5664-5668 PB L 83232 — SCHAUB, O., APPARATEBAU G.M.B.H., PFORZHEIM. Connection to produce compensation current in tube-voltmeter. Ger. patent application 128 828 VIIId/30/10 dated Feb 18, 1944. In German. 2.00

5669-5671 PB L 83232 — SCHMIDT, K., G.M.B.H., NECKARSULM. Method and device to measure the amperage of current consumers. Ger. patent application Sch 129 479 VIIId/21e dated Jun 28, 1944. In German. 2.00

5672-5673 PB L 83232 — SIEMENS-SCHUCKERTWERKE, BERLIN. Method for the electric insulation of conductors, coils or the like. Ger. patent application S 151 192 VIIIb/21e 7 dated Jul 9, 1942. In German. 2.00

5674-5679 PB L 83232 — JENAER GLASWERK, SCHOTT & GEN., JENA. Electrolyte meter for continuous recording. Ger. patent application J 76 818 VIIId/21e dated Feb 2, 1944. In German. 2.00
Addition to patent application K 166 768.

5680-5685 PB L 83232 — SIEMENS-SCHUCKERTWERKE, BERLIN. Direct current inverter to measure high direct current voltages or currents. Ger. patent application S 158 313 VIIId/21e dated Dec 23, 1943. In German. 2.00

5686-5691 PB L 83232 — SIEMENS-SCHUCKERTWERKE, BERLIN. Arrangement to measure and control the frequency, especially for the calibration and testing of meters. Ger. patent application S 155 852 dated Jun 1, 1943. In German. 2.00

5692->697 PB L 83232 — SIEMENS & HALSKE, BERLIN. Counter-coupled direct current tube amplifier for the technique of measuring and regulating, especially for pH-value measurements. Ger. patent application S 162 263 VIIId/21e dated Jan 29, 1945. In German. 2.00

5698-5709 PB L 83232 — SIEMENS & HALSKE, BERLIN. Indicating device for magnetic continuous fields with long-distance transmission of the position. Ger. patent application S 159 839 VIIId/21e dated May 23, 1944. In German. 3.00

5710-5716 PB L 83232 — JUNG-ZAEPER, G. (Inventor). Device to synchronize a tube oscillator by means of an alternating voltage, the frequency of which is an integral ratio to that of the generator voltage. Ger. patent application L 113 495 VIIId/21e, 28/01 dated Jan 4, 1944. In German. 2.00

5717-5719 PB L 83232 — Nonglaring protective glass for switch-board instruments. Ger. patent application L 113 554 VIIId/21e dated Jan 15, 1944. In German. 2.00

5720-5731 PB L 83232 — Peak voltmeter. Ger. patent application L 113 556 VIIId/21e dated Jan 15, 1944. In German. 3.00

5732-5737 PB I 83232 — TELEFUNKEN G.M.B.H., BERLIN-ZEHLENDORF. Arrangement to measure the faulty matching of ultra-short wave resistances. Ger. patent application T 58 656 dated Jan 25, 1943. In German. 2.00

5738-5741 PB L 83232 — TELEFUNKEN G.M.B.H., BERLIN-ZEHLENDORF. Wiring section

for microwaves. Ger. patent application T 58 652 dated Jan 29, 1943. In German. 2.00
Addition to patent application T 53 695 VIIIb/21c.

5742-5743 PB L 83232 Method to calibrate and test alternating current measuring instruments. Ger. patent application V 38 628 dated Jan 23, 1942. In German. 2.00

5744-5748 PB L 83232 TELEFUNKEN G.M.B.H., BERLIN-ZEHLENDORF. Fluorescent screen for cathode ray tubes for measuring purposes. Ger. patent application T 56 368 dated Oct 22, 1941. In German. 2.00

5749-5753 PB L 83232 TELEFUNKEN G.M.B.H., BERLIN-ZEHLENDORF. Arrangement for recording a current or voltage curve by means of a ray of light. Ger. patent application T 53 087 dated Nov 18, 1939. In German. 2.00
Addition to patent application 152 222 VIIId/21e.

5754-5760 PB L 83232 SIEMENS & HALSKE, BERLIN. Device to register and measure electric voltages, or other measuring quantities which were converted into equivalent voltage values. Ger. patent application S 149 521 dated Mar 24, 1942. In German. 2.00

5761-5769 PB L 83232 SIEMENS & HALSKE, BERLIN. Method and device for the stroboscopic calibration of meters. Ger. patent application S 134 366 dated Oct 25, 1938. In German. 2.00

5770-5773 PB L 83232 TELEFUNKEN G.M.B.H., BERLIN-ZEHLENDORF. Method for measuring ultra-high frequency resistances. Ger. patent application T 60 101 VIIId/21e, 24 dated Feb 12, 1944. In German. 2.00

5774-5778 PB L 83232 SIEMENS & HALSKE, BERLIN. Cathode ray oscillograph for short waves, especially for microwaves. Ger. patent application S 150 394 dated Apr 23, 1942. In German. 2.00

5779-5786 PB L 83232 SIEMENS & HALSKE, BERLIN. Amplitude dependent network in the form of a bridge, especially to protect measuring instruments from overcurrents. Ger. patent application S 148 885 dated Feb 9, 1942. In German. 2.00

5787-5792 PB L 83232 SIEMENS & HALSKE, BERLIN. Connection to measure the phase defect angle of inductances. Ger. patent application S 150 396 dated May 5, 1942. In German. 2.00

5793-5797 PB L 83232 SIEMENS & HALSKE, BERLIN. Method and device to release short electric current impulses. Ger. patent application S 150 395 dated Apr 30, 1942. In German. 2.00

5798-5801 PB L 83232 SIEMENS-SCHUCKERTWERKE, BERLIN. Additional instrument with electrical excitation for electricity meters. Ger. patent application S 148 917 dated Feb 14, 1942. In German. 2.00

5802-5805 PB L 83232 SIEMENS & HALSKE, BERLIN. Method to determine the electric total length of electric cables or conductors. Ger. patent application S 162 265 VIIId/21e dated Jan 30, 1945. In German. 2.00

5806-5808 PB L 83232 SIEMENS & HALSKE, BERLIN. Electron ray oscillograph. Ger. patent application S 156 216 dated Jun 22, 1943. In German. 2.00

5809-5814 PB L 83232 SIEMENS & HALSKE, BERLIN. Device for the voltage-independent measurement of electric frequency. Ger. patent application S 155 380 dated Apr 29, 1943. In German. 2.00

5815-5821 PB L 83232 PHILIPS PATENTVERWALTUNG G.M.B.H., BERLIN. Instrument for measuring permeability. Ger. patent application P 86 516 dated Jul 21, 1943. In German. 2.00

5822-5832 PB L 83232 SIEMENS & HALSKE, BERLIN. Device to measure A.C. voltages. Ger. patent application S 149 381 dated Mar 12, 1942. In German. 3.00

5833-5840 PB L 83232 SIEMENS-SCHUCKERTWERKE, BERLIN. Arrangement to compensate the capacitive reactance of test transformer cascades. Ger. patent application S 151 335 dated Jul 17, 1942. In German. 2.00

5841-5844 PB L 83232 SÜDDEUTSCHE TELEFON-APPARATE, KABEL- UND DRAHTWERKE, ABT. FORSCHUNGSANSTALT, BERLIN-KAULSDORF. Device for manufacturing logarithmic scales for measuring instruments. Ger. patent application S 143 620 dated Jan 15, 1941. In German. 2.00

5845-5847 PB L 83232 Arrangement to screen electrical transformers or the like. Ger. patent application L 114 865 VIIId/21d² dated Jun 22, 1944. In German. 2.00

5848-5850 PB L 83232 FEISTEL, E. (Inventor). Testing instrument for electric conductor parts, wires, etc. Ger. patent application L 114 866 VIIId/21e dated Jun 27, 1944. In German. 2.00

5851-5853 PB L 83232 LICENTIA, BERLIN. Electron switch for Brownian tubes (cathode ray tubes). Ger. patent application L 114 869 VIIId/21e dated Jun 28, 1944. In German. 2.00
Addition to patent L 111 817 VIIId.

5854-5856 PB L 83232 See frames 5851-5853.

5857-5860 PB L 83232 WERNER, F., A.G., BERLIN-MARIENFELDE. Instrument to measure or to regulate current and voltage. Ger. patent application W 114 177/21e dated Nov 19, 1943. In German. 2.00

5861-5863 PB L 83232 WERNER, F., A.G., BERLIN-MARIENFELDE. Current indicator for high-frequency generators. Ger. patent application W 114 178/21e dated Nov 19, 1943. In German. 2.00

5864-5866 PB L 83232 WILDEN, H. (Inventor). Device to detect disturbances in electric conductors or wiring systems. Ger. patent application W 114 566 VIIId/21e dated Feb 14, 1942. In German. 2.00

5867-5873 PB L 83232 Device to indicate the frequency of an electrical oscillation. Ger. patent application S 158 000/21e dated Nov 11, 1943. In German. 2.00

5874-5880 PB L 83232 SIEMENS & HALSKE, BERLIN. Automatic timing device for oscillographic images. Ger. patent application S 157 716/21e dated Oct 26, 1943. In German. 2.00

5881-5886 PB L 83232 NEUBERGER, J. (Inventor). Electric moving-coil instrument. Ger. patent application N 45 682 dated May 21, 1942. In German. 2.00

5887-5894 PB L 83232 SIEMENS-SCHUCKERTWERKE, BERLIN. Device to actuate measuring and regulating instruments depending on high direct voltages. Ger. patent application S 141 770 dated Jul 24, 1940. In German. 2.00

5895-5899 PB L 83232 SIEMENS & HALSKE, BERLIN. Device for oscillographic indication. Ger. patent application S 150 167 dated Apr 20, 1942. In German. 2.00

5900-5905 PB L 83232 SIEMENS & HALSKE, BERLIN. Device to record processes which are actuated at a previously uncontrollable instant by means of an oscillograph. Ger. patent application S 150 166 dated Apr 16, 1942. In German. 2.00

5906-5910 PB L 83232 SIEMENS & HALSKE, BERLIN. Device to protect oscillograph loops. Ger. patent application S 150 165 dated Apr 15, 1942. In German. 2.00

5911-5916 PB L 83232 SIEMENS & HALSKE, BERLIN. Device for the automatic return of the measuring element of an electric spot-indicating measuring instrument with a very low controlling force. Ger. patent application S 149 089 dated Feb 24, 1942. In German. 2.00

5917-5921 PB L 83232 SIEMENS & HALSKE, BERLIN. Oscillograph with a cylindrical lens which is arranged between a band-type illuminating surface and the lenses of the measuring reflector. Ger. patent application S 147 912 VIIId/21e dated Dec 2, 1941. In German. 2.00

5922-5935 PB L 83232 SIEMENS-SCHUCKERTWERKE, BERLIN. Measuring arrangement to determine a periodically occurring voltage integral. Ger. patent application S 147 425 dated Oct 7, 1941. In German. 3.00

5936-5940 PB L 83232 PATIN, A. (Inventor). Cable testing instrument. Ger. patent application P 82 978 dated Sep 1, 1941. In German. 2.00

5941-5945 PB L 83232 SIEMENS-SCHUCKERTWERKE, BERLIN. Testing of high-voltage installations. Ger. patent application S 139 114 dated Nov 6, 1939. In German. 2.00

5946-5977 PB L 83232 Method and device to determine defects in electric net works. Ger. patent application J 75 948/21e dated Sep 27, 1943. In German. 5.00

5978-5990 PB L 83232 KOCH & STERZEL A.G., DRESDEN. Device to compare the speed of two moving systems, especially the speed of an electricity meter which is to be tested with that of a standard meter. Ger. patent application K 139 379 VIIId/21e dated Jan 20, 1940. In German. 3.00

5991-5995 PB L 83232 Device to indicate an insulation defect. Ger. patent application K 139 813 dated Oct 31, 1935. In German. 2.00
Addition to patent application L 137 698 VIIIa/21e.

5996-5999 PB L 83232 DEUTSCHE VERSUCHSANSTALT FÜR LUFTFAHRT E.V., BERLIN, ADLERSHOF. Moving coil instrument for great deflection. Ger. patent application D 82 478 VIIId/21e dated Nov 13, 1941. In German. 2.00

6000-6010 PB L 83232 SIEMENS & HALSKE, BERLIN. Connection for tube amplifiers for alternating current quantities, for use in measuring and regulating technique. Ger. patent application S 156 476 dated Jul 12, 1943. In German. 3.00

6011-6020 PB L 83232 SIEMENS-SCHUCKERTWERKE, BERLIN. Induction type meter with temperature compensation. Ger. patent application S 156 479 dated Jul 12, 1943. In German. 2.00

6021-6025 PB L 83232 SIEMENS APPARATE UND MASCHINEN G.M.B.H., BERLIN. Device to register single processes with cathode ray tubes. Ger. patent application S 158 305 VIIId/21e dated Dec 29, 1943. In German. 2.00

6026-6029 PB L 83232 SWOBODA, G. (Inventor). Multiple electron ray oscillograph. Ger. patent application S 158 259 VIIId/21e dated Dec 15, 1943. In German. 2.00

6030-6032 PB L 83232 SIXTUS and DORNSEIFER (Inventors). Method for the nondestructive measurement of alternating current permeability. Ger. patent application L 114 810 VIIId/21e dated Jun 17, 1944. In German. 2.00

6033-6036 PB L 83232 JUNG-ZAEPER, C. (Inventor). Device to measure the quality of electric coils. Ger. patent application L 114 825 VIIId/21e dated Jun 17, 1944. In German. 2.00

6037-6038 PB L 83232 Wattmeter with several ranges. Ger. patent application L 114 407 VIIId/21e dated Apr 25, 1944. In German. 2.00

6039-6045 PB L 83232 Method and device to measure electric resistances. Ger. patent application L 114 457 VIIId/21e dated May 2, 1944. In German. 2.00
Addition to patent application L 108 356 VIIId/21e.

6046-6052 PB L 83232 SIEMENS APPARATE UND MASCHINEN G.M.B.H., BERLIN. Method and device to measure the frequency. Ger. patent application S 144 447 dated Mar 17, 1941. In German. 2.00

6053-6055 PB L 83232 SIEMENS-SCHUCKERTWERKE, BERLIN. Arrangement to imitate and illustrate electric networks or lines. Ger. patent application S 144 455 VIIId/21e dated Mar 13, 1941. In German. 2.00
Separation of S 139 929 VIIId/21e, 36/10.

6056-6062 PB L 83232 SIEMENS-SCHUCKERTWERKE, BERLIN. Device to test the electric

properties of plate type bodies. Ger. patent application S 144 515/21e dated Mar 19, 1941. In German. 2.00

6063-6066 PB L 83232 SIEMENS-SCHUCKERTWERKE, BERLIN. Device to determine the electric qualities of plastic masses, especially of noncompact masses. Ger. patent application S 144 516 VIIId/21e dated Mar 19, 1941. In German. 2.00

6067-6069 PB L 83232 SIEMENS-SCHUCKERTWERKE, BERLIN. Device to compare frequencies. Ger. patent application S 144 442 dated Mar 13, 1941. In German. 2.00

6070-6073 PB L 83232 RIPPER, N. and SCHULZ, H. (Inventors). Method to determine the voltage amplitude of a conductor or of an oscillating current in the range of microwaves. Ger. patent application R 117 422/21e dated Oct 28, 1943. In German. 2.00

6074-6078 PB L 83232 SIEMENS & HALSKE, BERLIN. Arrangement to measure phase defect angles. Ger. patent application S 139 418 dated Dec 2, 1939. In German. 2.00

6079-6084 PB L 83232 SIEMENS & HALSKE, BERLIN. Device to keep constant the product of current and voltage, especially for the calibration of wattmeter-type measuring instruments, relays, and the like. Ger. patent application S 143 608 dated Jan 8, 1941. In German. 2.00

6085-6089 PB L 83232 KOCH & STERZEL, DRESDEN. Connection to measure alternating voltages or alternating currents by means of amplifier tubes. Ger. patent application dated Dec 7, 1943. In German. 2.00
Addition to patent application K 139 408 VIIId/21e.

6090-6093 PB L 83232 KINNE, E. (Inventor). Line tester. Ger. patent application K 169 256 dated Aug 3, 1943. In German. 2.00

6094-6098 PB L 83232 KAISER-WILHELM-INSTITUT FÜR METALLFORSCHUNG, STUTTGART. Method and device to measure the field intensity in a piece of iron. Ger. patent application K 168 995 dated Jul 5, 1943. In German. 2.00

6099-6102 PB L 83232 SIEMENS-SCHUCKERTWERKE, BERLIN. Direct current meter in heavy current installations. Ger. patent application S 149 886 dated Apr 9, 1942. In German. 2.00

6103-6112 PB L 83232 SIEMENS-SCHUCKERTWERKE, BERLIN. Device for the measurement and recording of the current curve of electric current surges. Ger. patent application S 130 384 dated May 9, 1942. In German. 2.00

6113-6116 PB L 83232 SIEMENS-SCHUCKERTWERKE, BERLIN. Device measuring the apparent power for all four quadrants. Ger. patent application S 143 971 dated Feb 10, 1938. In German. 2.00
Addition to patent application S 140 258 VIIId/21e.

6117-6121 PB L 83232 RHEINMETALL-BORSIG A.G., BERLIN. Circuit for testing transient resistances. Ger. patent application R 114 465 dated Oct 31, 1942. In German. 2.00

6122-6130 PB L 83232 Device to indicate directly the phase of a current or a voltage in relation to a fixed reference value. Ger. patent application R 106 633 dated Dec 22, 1939. In German. 2.00

6131-6135 PB L 83232 SIEMENS-SCHUCKERTWERKE, BERLIN. Instrument which records and prints the apparent power maximum. Ger. patent application S 144 195 dated Feb 25, 1941. In German. 2.00

6136-6140 PB L 83232 RHEINISCH-WESTFÄLISCHES ELEKTRIZITÄTS-WERK A.G., ESSEN. Indicator for disturbances of three-phase current four-conductor meters. Ger. patent application R 108 638 dated Nov 1, 1940. In German. 2.00

6141-6145 PB L 83232 SIEMENS & HALSKE, BERLIN. Direct reading frequency meter. Ger. patent application S 144 733 VIIId/21e, 36/03 dated Apr 11, 1942. In German. 2.00

6146-6151 PB L 83232 SIEMENS & HALSKE, BERLIN. Arrangement to test motor meters at various percentages of the rated load. Ger. patent application S 146 373 VIIId/21e, 22/51 dated Aug 27, 1942. In German. 2.00
Addition to patent application S 133 066 VIIId/21e.

6152-6158 PB L 83232 SIEMENS & HALSKE, BERLIN. Device to influence the scale course in a rotary magnet meter. Ger. patent application S 155 678 VIIId/21e dated May 22, 1943. In German. 2.00

6159-6162 PB L 83232 SIEMENS-SCHUCKERTWERKE, BERLIN. Stroboscopic calibration or testing method for meters. Ger. patent application S 139 836 VIIId/21e dated Jan 17, 1940. In German. 2.00

6163-6172 PB L 83232 SIEMENS & HALSKE, BERLIN. Electron ray oscillograph with time-mark registration. Ger. patent application S 142 774 dated Oct 31, 1940. In German. 2.00

6173-6180 PB L 83232 SIEMENS & HALSKE, BERLIN. Ground connection measuring instrument. Ger. patent application S 142 271 dated Sep 14, 1940. In German. 2.00
Addition to patent application S 133 703 VIIId/21e.

6181-6187 PB L 83232 ZERMEISTER (Inventor). Measuring bridge, especially for sorting of electric resistances. Ger. patent application L 114 491 VIIId/21e dated May 4, 1944. In German. 2.00

6188-6190 PB L 83232 Arrangement of a loop oscillograph. Ger. patent application L 114 670 VIIId/21e dated May 24, 1944. In German. 2.00

6191-6195 PB L 83232 LICENTIA G.M.B.H., BERLIN. Connection for cathode ray oscillograph tubes. Ger. patent application L 114 709 VIIId/21e dated May 15, 1944. In German. 2.00

6196-6198 PB L 83232 LEIHS, F. (Inventor). Frequency meter. Ger. patent application L 114 707 VIIId/21e dated May 30, 1944. In German. 2.00

6199-6203 PB L 83232 JUNG-ZAEPER, C. (Inventor). Method for determining complex resistances. Ger. patent application L 114 689 VIIId/21e dated May 23, 1944. In German. 2.00
Addition to patent application L 111 780 VIIId/21e.

6204-6209 PB L 83232 SIEMENS & HALSKE, BERLIN. Device for the correct time operation of synchronous motors when connected to unregulated alternating current nets, especially for the propulsion of the writing surfaces of measuring instruments. Ger. patent application S 157 108/21e dated Sep 8, 1943. In German. 2.00

6210-6214 PB L 83232 SIEMENS-SCHUCKERTWERKE, BERLIN. A.C. generating or distributing plant. Ger. patent application S 152 356 dated Oct 3, 1942. In German. 2.00

6215-6217 PB L 83232 SCHULZ, M. (Inventor). Method to test and specify a frequency mixture by visualization as a frequency spectrum. Ger. patent application Sch 128 089 dated Sep 20, 1943. In German. 2.00

6218-6221 PB L 83232 Oscillograph with multiple indication. Ger. patent application Sch 130 414 VIIId/21e dated Feb 14, 1945. In German. 2.00

6222-6230 PB L 83232 SIEMENS APPARATE UND MASCHINEN G.M.B.H., BERLIN. Method and device to measure magnetic continuous fields. Ger. patent application S 153 903 dated Jan 27, 1943. In German. 2.00

6231-6237 PB L 83232 SIEMENS & HALSKE, BERLIN. Electric direct current measuring device with moving permanent magnet. Ger. patent application S 153 182 dated Dec 3, 1942. In German. 2.00

6238-6242 PB L 83232 PATIN, A. (Inventor). Arrangement for examining electric continuous fields. Ger. patent application P 87 768 VIIId/21e dated May 30, 1944. In German. 2.00

6243-6248 PB L 83232 SIEMENS-SCHUCKERTWERKE, BERLIN. Method and device for frequency measurements. Ger. patent application S 156 309 dated Jun 30, 1943. In German 2.00

6249-6253 PB L 83232 SIEMENS & HALSKE, BERLIN. Method and device to correct the frequency of electric measuring and indicating instruments. Ger. patent application S 154 474 dated Mar 4, 1943. In German. 2.00

6254-6257 PB L 83232 SIEMENS-SCHUCKERTWERKE, BERLIN. Method and device to examine electric cables and conductors. Ger. patent application S 159 931 VIIId/21e dated May 31, 1944. In German. 2.00

6258-6260 PB L 83232 SIEMENS & HALSKE, BERLIN. Circuit to regulate the brightness in electron beam oscillographs. Ger. patent application S 158 437/21e dated Jan 11, 1944. In German. 2.00

6261-6289 PB L 83232 SIEMENS & HALSKE, BERLIN. Device to regulate or measure current intensities or voltages, especially the current of a projector lamp. Ger. patent application S 153 748/21e dated Jan 13, 1943. In German. 4.00

6290-6308 PB L 83232 ASKANIA-WERKE A.G., BERLIN-FRIEDENAU. Direct voltage or direct current amplifiers for measuring purposes. Ger. patent application E 50 266 VIIIo/21a dated Feb 3, 1941. In German. 3.00

PHOTOGRAPHIC AND OPTICAL GOODS (INCLUDING PHOTOGRAPHIC PROCESSING)

PB L 82206. REICHSPATENTAMT, BERLIN. Patent applications for cameras and accessories. (FIAT Microfilm Reel G 48, Frames 5787-6541) 1937-1945. 755 f. Price: Microfilm-$7.00 - Enlargement print-$77.00
This reel was prepared by FIAT investigators in Germany. 97 individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $7.00. Please include PB and frame numbers when ordering individual items. In German.

Frames	Title	Price
5787-5788 PB L 82206	CZECH, A. (Inventor). Screen for three dimensional X-ray pictures. Ger. patent application C 59 008 IXa/57a dated May 10, 1944. In German. Addition to patent application C 58 235 IXa/57a.	$2.00
5789-5794 PB L 82206	KLANGFILM G.M.B.H., BERLIN. Device for guiding a film with the help of a spring loaded idler. Ger. patent application K 152 580 dated Nov 28, 1938. In German.	2.00
5795-5801 PB L 82206	I.G. FARBEN, WOLFEN. Galilei view finder in which through optical means, markings are reflected into the field of view. Ger. patent application J 70 588 IIa/57a dated Mar 5, 1943. In German.	2.00
5802-5805 PB L 82206	I.G. FARBEN, WOLFEN. Roll film camera using different kinds of films. Ger. patent application J 78 230 IXa/57a dated Sep 14, 1944. In German.	2.00
5806-5809 PB L 82206	I.G. FARBEN, WOLFEN. Photographic printing device. Ger. patent application J 58 277 IXa/57a dated Sep 22, 1944. In German.	2.00
5810-5814 PB L 82206	INTERFOT GES. STRATMANN & CO., BERLIN. Process and device for the reproduction of papers in blueprint machines. Ger. patent application J 73 485 dated Nov 2, 1942. In German. Addition to patent application J 73 361 IXa/57c.	2.00
5815-5821 PB L 82206	I.G. FARBEN, WOLFEN. Illuminating system for printing devices. Ger. patent application J 73 484 IXa/57d dated Nov 3, 1942. In German.	2.00
5822-5826 PB L 82206	INTERFOT GES. STATMANN & CO., BERLIN. Device for making blueprints or contact copies of single objects (patterns). Ger. patent application J 73 445 dated Oct 26, 1942. In German.	2.00
5827-5843 PB L 82206	STICKLER, A. (Inventor). Camera for reproduction purposes with automatic or semiautomatic focusing. Ger. patent application dated Jun 22, 1942. In German.	3.00

5844-5847 PB L 82206 JANKE, G. (Inventor). Practical adjustment and illuminating device for still and moving picture photography, especially adaptable for operations. Ger. patent application J 71 987 IXa/57a dated Aug 2, 1943. In German. 2.00

5848-5854 PB L 82206 KNORR, J. (Inventor). Method for controlling mechanical actions from a sound carrier. Ger. patent application K 164 917 dated Jun 3, 1942. In German. 2.00

5855-5860 PB L 82206 KRAMP, E. (Inventor). Process for making continuous pictures, especially trick-films with a three-dimensional effect, through subdivision of the picture in different planes. Ger. patent application K 164 923 dated Jun 3, 1942. In German. 2.00

5861-5865 PB L 82206 INTERFOT GES. STRATMANN & CO., BERLIN. Clutch for automatically working photocopy reproducing or projection devices. Ger. patent application J 74 283 dated Feb 10, 1943. In German. 2.00

5866-5877 PB L 82206 INTERFOT GES. STRATMANN & CO., BERLIN. Apparatus for developing long, band-shaped light-sensitive layers. Ger. patent application J 71 594 dated Feb 19, 1942. In German. 3.00

5878-5881 PB L 82206 I.G. FARBEN, WOLFEN. Method and device for fastening the end of a film or film-lead into the slit of a film reel. Ger. patent application J 71 569 IXa/57a dated Feb 17, 1942/Mar 28, 1942. In German. 2.00

5882-5982 PB L 82206 SCHINZEL, K. and L. (Inventors). Process for making natural color photographs. Ger. patent application Sch 117 247 IVa/57b dated Dec 15, 1938. In German. 11.50
Addition to patent application Sch 116 809 IVa/57b.

5983-5989 PB L 82206 KODAK A.G., BERLIN. Base range-finder for cameras. Ger. patent application K 166 602 dated Nov 25, 1942. In German. 2.00

5990-5995 PB L 82206 KODAK A.G., BERLIN. Bearings for optical parts which are turned or swung about in cameras. Ger. patent application K 166 603 dated Nov 25, 1942. In German. 2.00

5996-5999 PB L 82206 KALLE & CO., WIESBADEN. Device for blueprinting. Ger. patent application K 156 576 IXa/57c dated Sep 12, 1940. In German. 2.00

6000-6002 PB L 82206 STEINHEIL SÖHNE, MUNICH. Device for transporting the film in movie apparatus. Ger. patent application dated Oct 9, 1944. In German. 2.00

6003-6008 PB L 82206 N.V. PHILIPS'GLOSILAMPENFABRIEKEN EINDHOVEN. Method for taking photographs with the help of a flash bulb. Ger. patent application N 47 609 IXa/57d dated Mar 6, 1944. In German. 2.00

6009-6014 PB L 82206 OPTICHOTECHNA G.M.B.H., PRERAU. Movie device, especially the film gate. Ger. patent application O 24 878 IX/57a dated May 1, 1942. In German. 2.00

6015-6018 PB L 82206 OSTHEIMER, E. (Inventor). Device for turning on a fading signal in projectors. Ger. patent application O 25 607 dated Sep 9, 1942. In German. 2.00

6019-6023 PB L 82206 OBENAUF, W. (Inventor). Combination camera for black and white and color film. Ger. patent application O 25 160 dated Oct 15, 1941. In German. 2.00

6024-6029 PB L 82206 MAYER, H., & CO., GÖRLITZ. Process for the transmission of printable drawings with the help of light sensitive emulsions onto cylindrical, tapered or spherical surfaces. Ger. patent application O 26 663 IXa/57c, 11 dated Jul 4, 1944. In German. 2.00
Addition to patent application O 26 574 IXa/57c.

6030-6045 PB L 82206 Device for the taking and/or reproducing of movie pictures. Ger. patent application F 74 824 IXa/57a dated May 20, 1937. In German. 3.00

6046-6057 PB L 82206 STEINECK, O. (Inventor). Drying chamber for film and paper bands. Ger. patent application St 63 170 dated Jun 10, 1943. In German. 3.00

6058-6065 PB L 82206 ZEISS IKON, DRESDEN. Method to regulate the adjusting members of an exposure controlling device with built-in photoelectrical exposure meter and devices therefore. Ger. patent application J 27 674 dated Feb 4, 1943. In German. 2.00

6066-6077 PB L 82206 ZEISS IKON, DRESDEN. Process for the photographic reproduction of line drawings and the like through contact printing. Ger. patent application Z 27 734 dated Feb 25, 1945. In German. 3.00

6078-6081 PB L 82206 ZERRES, HEINRICH (Inventor). Camera dolly with automatic focussing of the camera. Ger. patent application Z 27 300 dated Sep 3, 1942. In German. 2.00
Addition to patent application Z 26 986 IXa/57a.

6082-6084 PB L 82206 Automatic starting of the exposure regulating device by light sensitive material. Ger. patent application St 62 886 dated Mar 22, 1943. In German. 2.00

6085-6089 PB L 82206 ZEISS IKON A.G., DRESDEN. Device for winding film on a helically shaped reel. Ger. patent application Z 28 736 IXa/57d dated Sep 11, 1944. In German. 2.00

6090-6092 PB L 82206 FRANKE & HEIDECKE, BRAUNSCHWEIG. Base range finder for photographic purposes combined with a view finder. Ger. patent application F 88 074 IXa/57a dated Nov 11, 1941. In German. 2.00

6093-6110 PB L 82206 FRANKE & HEIDECKE, BRAUNSCHWEIG. Base range finder for photographic purposes, combined with a view finder. Ger. patent application F 88 074 IXa/57a dated Jun 21, 1941, Nov 11, 1941. In German. 3.00

6111-6129 FRIES, G. (Inventor). De-

PB L 82206 vice for rewinding films. Ger. patent application F 87 022 dated Jun 22, 1939. In German. 3.00

6130-6135 PB L 82206 PRAUSCHKE, J. (Inventor). Panorama attachment for photographic cameras. Ger. patent application dated Dec 1, 1943. In German. 2.00

6136-6138 PB L 82206 RAVEN, E. (Inventor). Movie camera for upright observation of the photographic image. Ger. patent application R 118 636 IXa/57a dated May 4, 1944. In German. 2.00

6139-6149 PB L 82206 "ROBOT"-BERNING & CO., GROSS-SCHÖNAU I. SACHSEN. Device for releasing shutters and cameras. Ger. patent application dated Jun 28, 1944. In German. 3.00

6150-6162 PB L 82206 SIEMENS & HALSKE, BERLIN. Movie projector with a safety switch for the light source. Ger. patent application S 97 042 IXa/57a dated Feb 8, 1941. In German. 3.00

6163-6179 PB L 82206 BERNING & CO., GROSSCHÖNAU. Camera with swivel-action focal plane shutter and clock work drive. Ger. patent application dated Oct 25, 1944. In German. 3.00
Addition to patent application R 119 603 IXa/57a.

6180-6192 PB L 82206 RISZDÖRFER, O. (Inventor). Camera with built-in automatic exposure regulating device and photocell. Ger. patent application R 119 369 IXa/57a dated Jul 28, 1944. In German. 3.00

6193-6196 PB L 82206 POPP, E. (Inventor). Method of storing, printing and enlarging negatives. Ger. patent application P 86 972 IXa/57d dated Nov 15, 1943. In German. 2.00

6197-6201 PB L 82206 POPP, E. (Inventor). Method and device for filing of negatives. Ger. patent application dated Oct 29, 1943. In German. 2.00

6202-6208 PB L 82206 KLANGFILM G.M.B.H., BERLIN. Arrangement for the driving of monitoring and cutting tables or other apparatus for sound-film or movietone. Ger. patent application K 152 390 IXa/57a dated Apr 16, 1942. In German. 2.00

6209-6214 PB L 82206 INTERFOT GES. STRATMANN & CO., BERLIN. Magazine for photographic papers or films with automatic locking and arresting device. Ger. patent application J 75 912 dated Sep 23, 1943. In German. 2.00
Addition to patent application J 71 602 IVa/57b.

6215-6219 PB L 82206 INTERFOT GES. STRATMANN & CO., BERLIN. Magazine for photographic papers or films with an automatic position indicating device. Ger. patent application J 75 911 dated Sep 23, 1943. In German. 2.00

6220-6228 PB L 82206 GLÄSER, W. (Inventor). Method and device for the optical intensity measuring of photographic densities. Ger. patent application G 103 925 IXa/57d dated Aug 11, 1941. In German. 2.00

6229-6233 PB L 82206 Device for the even illumination of a plane. Ger. patent application G 105 488 IXa/57d dated Jun 3, 1942. In German. 2.00

6234-6261 PB L 82206 GEYER-WERKE, BERLIN. Method for moving of filament or band-shaped structures. Ger. patent application G 105 466 IXa/57d dated May 26, 1942. In German. 4.00

6262-6267 PB L 82206 KOCH & STERZEL, DRESDEN. Apparatus for taking pictures of X-ray fluorescent screens. Ger. patent application K 156 595 /57a dated Jul 23, 1942. In German. 2.00

6268-6271 PB L 82206 KLANGFILM G.M.B.H., BERLIN. Device for controlling optical printing apparatus. Ger. patent application K 156 613 IXa/57a dated Dec 11, 1941. In German. 2.00

6272-6284 PB L 82206 KORTH, H. (Inventor). Movie camera, especially for sound film with rotating prismatic shutter. Ger. patent application K 161 075 IXa/57a dated May 12, 1941. In German. 3.00

6285-6288 PB L 82206 KORELLE-WERK, G.H. BRANDMANN & CO., DRESDEN. Mirror reflex camera with built-in photoelectric exposure meter. Ger. patent application K 165 987 dated Sep 25, 1942. In German. 2.00
Addition to patent application K 157 926 IXa/57a.

6289-6294 PB L 82206 KODAK A.G., BERLIN. Method and device to achieve exactly matching register when processing two- three or multi-layer films. Ger. patent application K 166 022 dated Sep 29, 1942. In German. 2.00

6295-6298 PB L 82206 KIEFER, H. (Inventor). Focusing and exposing device for still and movie cameras. Ger. patent application dated Oct 14, 1942. In German. 2.00

6299-6302 PB L 82206 AYSCHE, F. (Inventor). Container for films, negatives and similar material. Ger. patent application A 97 631 dated Mar 18, 1943. In German. 2.00

6303-6307 PB L 82206 INTERFOT GES. STRATMANN & CO., BERLIN. Apparatus for the continuous photographic printing of samples. Ger. patent application dated Oct 28, 1943. In German. 2.00

6308-6311 PB L 82206 I.G. FARBEN, WOLFEN. Connection between pieces of film. Ger. patent application dated Jul 27, 1944. In German. 2.00

6312-6316 PB L 82206 These frames are missing.

6317-6320 PB L 82206 Electrical equipment, especially switching of resistors into the line for small film movie projectors. Ger. patent application G 106 002 IXa/57a dated Aug 31, 1942. In German. 2.00

6321-6322 PB L 82206 Light-weight concrete bricks for the construction of concrete buildings without using framework. Ger. patent application G 108 314 dated Oct 21, 1943. In German. 2.00

6323-6326 PB L 82206 DRESCHER, H. (Inventor). Device for pre-selecting the diaphragm opening in cameras, especially for single-lens mirror reflex cameras. Ger. patent application D 93 660 IXa/57a dated Jul 21, 1944. In German. 2.00

6327-6332 PB L 82206 Light source for sound movie projectors with a common lamp for picture and sound projection. Ger. patent application E 52 309 IXa/57a dated Sep 11, 1941, Jun 24, 1941, Mar 14, 1939. In German. 2.00

6333-6337 PB L 82206 DURST A.G., STUTTGART. Photographic enlarger. Ger. patent application D 94 520 IXa/57a dated Jan 31, 1945. In German. 2.00

6338-6341 PB L 82206 DÖNITZ, F. (Inventor). Arrangement for aerial photography, especially for scouting purposes on the high sea. Ger. patent application D 83 147 dated Aug 15, 1940. In German. 2.00

6342-6351 PB L 82206 DIETRICH, F. (Inventor). Method of taking pictures of objects, especially transparencies or screens of X-ray apparatus. Ger. patent application D 85 216 dated Jun 9, 1941. In German. 2.00

6352-6357 PB L 82206 KODAK A.G., BERLIN. View finder for cameras. Ger. patent application K 155 772 dated Dec 8, 1942. In German. 2.00

6358-6361 PB L 82206 KRÜGER, O. (Inventor). Reel winding device with a centrifugal governor in projection apparatus. Ger. patent application K 166 593 IXa/57a dated Nov 24, 1942. In German. 2.00

6362-6365 PB L 82206 PERUTZ, O. (Inventor). Process for blue-, green- and yellow sensitizing of halogen silver emulsions through isocyanines. Ger. patent application P 75 726 IVb/57b dated May 23, 1939, Jan 25, 1939. In German. 2.00

6366-6371 PB L 82206 PINKAU, E., & CO., LEIPZIG. Process for pre-treatment of acetate films for the application of photographic emulsions. Ger. patent application dated Jan 19, 1939. In German. 2.00

6372-6374 PB L 82206 SCHERER, A. (Inventor). Apparatus for taking and reproducing colored pictures without colorfilm. Ger. patent application Sch 129 863 IXa/57a dated Aug 28, 1944. In German. 2.00

6375-6380 PB L 82206 STUMPF, P. (Inventor). Device for the showing of X-ray pictures which were taken of cross-sections of the body. Ger. patent application St 55 109 IX/57a dated Nov 3, 1937. In German. 2.00

6381-6384 PB L 82206 ZEISS IKON A.G., DRESDEN. Process for making lettering guides for writing on diapositives. Ger. patent application Z 26 795 IXa/57a dated Jan 6, 1943. In German. 2.00

6385-6391 PB L 82206 ZEISS IKON A.G., DRESDEN. Timer for photographic development purposes in combination with a thermometer. Ger. patent application dated Dec 5, 1942. In German. 2.00

6392-6395 PB L 82206 ZEISS IKON, DRESDEN. Device for the photographic reproduction of drawings, plans and similar objects. Ger. patent application Z 27 120 dated Jun 5, 1942. In German. 2.00
Addition to patent application Z 26 487 IXa/57c.

6396-6401 PB L 82206 ZEISS IKON A.G., DRESDEN. Device for reeling a film-band back and forth for the purpose of treating same in a bath. Ger. patent application Z 26 778 IXa/57a dated Jan 8, 1943, Aug 22, 1942. In German. 2.00

6402-6405 PB L 82206 SIEMENS & HALSKE, BERLIN. Device for increasing the sensitivity of photographic emulsions which are used in cathode-ray apparatus. Ger. patent application S 147 090 IVa/57b dated Sep 16, 1941. In German. 2.00

6406-6415 PB L 82206 ZEISS IKON A.G., DRESDEN. Camera, especially for moving pictures with built-in photoelectric exposure meter. Ger. patent application Z 27 069 dated May 8, 1942. In German. 2.00

6416-6421 PB L 82206 ZEISS IKON, DRESDEN. Camera with a built-in mirror base range-finder and exposure-meter. Ger. patent application Z 22 895 IXa/57a dated Jul 27, 1939, May 24, 1939. In German. 2.00

6422-6432 PB L 82206 ZÜGEL, W. (Inventor). Base range-finder. Ger. patent application Z 22 311 IXa/57a dated Jul 23, 1942, Aug 25, 1937. In German. 3.00

6433-6437 PB L 82206 ZEISS IKON, DRESDEN. Adjustable stand for optical devices. Ger. patent application dated Feb 10, 1943. In German. 2.00

6438-6444 PB L 82206 SEIFERT, P. (Inventor). Storage and filing box for diapositives. Ger. patent application S 154 480 dated Mar 8, 1943. In German. 2.00

6445-6450 PB L 82206 SACHSE, E. (Inventor). Observation device, especially for submarines. Ger. patent application S 155 590 IXa/57a dated May 17, 1943. In German. 2.00

6451-6455 PB L 82206 SIEMENS & HALSKE, BERLIN. Arrangement for the exposure of several photographic plates or films, especially in electron microscopes. Ger. patent application S 157 313 IXa/57a dated Sep 17, 1943. In German. 2.00

6456-6459 PB L 82206 SENEKOVIC, G. (Inventor). Switching means for movie projectors which are controlled by the film itself. Ger. patent application S 149 960 dated Apr 17, 1942. In German. 2.00

6460-6465 PB L 82206 — SIEMENS & HALSKE, BERLIN. Film counter driven by the film itself. Ger. patent application S 151 537 dated Jul 31, 1942. In German. 2.00

6466-6471 PB L 82206 — SIEMENS & HALSKE, BERLIN. Magazine for several films which are to be exposed one after the other, especially in cathode-ray devices. Ger. patent application S 151 422 dated Jul 27, 1942. In German. 2.00

6472-6477 PB L 82206 — SPREYER, H. (Inventor). Electrical devices for the consecutive ignition of vacuum flash bulbs. Ger. patent application S 151 282 IXa/57d dated Jul 16, 1942. In German. 2.00

6478-6482 PB L 82206 — SIEMENS-REINIGER, ERLANGEN. Device for taking pictures of X-ray screens. Ger. patent application S 152 035 dated Sep 14, 1942. In German. 2.00

6483-6490 PB L 82206 — SIEMENS-REINIGER, ERLANGEN. Device for taking stereo X-ray pictures. Ger. patent application S 148 232 IXa/57a dated Dec 10, 1942. In German. 2.00

6491-6496 PB L 82206 — Driving gear for blueprint machines having a cylindrical printing roll. Ger. patent application Qu 2344 dated Dec 17, 1941. In German. 2.00

6497-6504 PB L 82206 — Blueprint machine in which the prints are transported with the help of an endless belt along the printing surface. Ger. patent application Qu 2340 IXa/57d dated Oct 21, 1941. In German. 2.00

6505-6506 PB L 82206 — RAUCH, C. (Inventor). Camera for still and moving pictures with built-in exposure meter. Ger. patent application R 94 405 IXa/57a dated Oct 17, 1935. In German. 2.00

6507-6512 PB L 82206 — QUARZLAMPEN G.M.B.H., HANAU (MAIN). Equipment for producing blueprints. Ger. patent application Qu 2333 dated Jun 24, 1941. In German. 2.00

6513-6528 PB L 82206 — QUARZLAMPEN GES. M.B.H., HANAU/M. Blueprint machine with a long tubular light source. Ger. patent application Qu 2334 dated Jul 5, 1941. In German. 3.00

6529-6530 PB L 82206 — RAVEN, E.H. (Inventor). Projection opening and film gate to hold the film flat. Ger. patent application R 113 099 IXa/57a dated May 29, 1942. In German. 2.00
Addition to patent application R 107 791 IVa/57b.

6531-6541 PB L 82206 — RENNER, A. (Inventor). Movie projector, especially for small films. Ger. patent application R 108 223 dated Aug 28, 1940. In German. 3.00

PB L 82208. REICHSPATENTAMT, BERLIN. Patent applications for cameras and accessories. (FIAT Microfilm Reel J 45, Frames 3746-4526) 1935-1944. 781 f. Price: Microfilm-$7.00 - Enlargement print-$80.00
This reel was prepared by FIAT investigators in Germany. 105 individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $7.00. Please include PB and frame numbers when ordering individual items. In German.

Frames	Title	Price
3746-3749 PB L 82208	BAUER, E., G.M.B.H., STUTTGART, GERMANY. Projection device with adjustable lamp. Ger. patent application B 195237, dated Aug 16, 1941. In German.	$2.00
3750-3754 PB L 82208	BAUER, E., STUTTGART, GERMANY. Portable movie camera and light source. Ger. patent application B 195236, dated Aug 16, 1941. In German.	2.00
3755-3760 PB L 82208	BAUER, E., G.M.B.H., STUTTGART, GERMANY. Projector and adjustment for the correct position of the bulb. Ger. patent application B 195 209/IX4/57a, dated Aug 13, 1941. In German.	2.00
3761-3765 PB L 82208	BAUER, E., G.M.B.H., STUTTGART, GERMANY. Portable movie projector in a suitcase. Ger. patent application B 195 208, dated Aug 13, 1941. In German.	2.00
3766-3767 PB L 82208	HEMPEL, E. Process for making sound movie films. Ger. patent application B 193144, dated Jan 23, 1941. In German.	2.00
3768-3779 PB L 82208	BOSCH, ROBERT, G.M.B.H., STUTTGART, GERMANY. Photographic or movie camera with automatic adjustment of the diaphragm, controlled by a photocell. Ger. patent application B 194406 IXa/57a, dated May 27, 1941. In German.	3.00
3780-3784 PB L 82208	BOSCH, ROBERT, G.M.B.H., STUTTGART, GERMANY. Movie projector with forced air cooling. Ger. patent application B 194351 IXa/57a, dated May 22, 1941. In German. Addition to patent application B 194159 IIa/57a.	2.00
3785-3790 PB L 82208	BAUER, E., G.M.B.H., STUTTGART, GERMANY. Sound film device. Ger. patent application B 194296 IXa/57a, dated May 17, 1941. In German.	2.00
3791-3796 PB L 82208	BAUER, E., G.M.B.H., STUTTGART, GERMANY. Motor drive for substandard movie projectors. Ger. patent application B 194295, dated May 17, 1941. In German.	2.00
3797-3800 PB L 82208	BOSCH, ROBERT, G.M.B.H., STUTTGART, GERMANY. Movie projector with bulb which is cooled by a blower. Ger. patent application B 194555 IXa/57a, dated Jun 9, 1941. In German. Addition to patent application B 194159 IXa/57a.	2.00
3801-3807 PB L 82208	BAUER, E., G.M.B.H., STUTTGART, GERMANY. Wiring and switching arrangement for projectors. Ger. patent application B 104535 IXa/157a, dated Jun 9, 1941. In German.	2.00
3808-3813 PB L 82208	BOSCH, ROBERT, G.M.B.H., STUTTGART, GERMANY. Movie projector with forced air cooling for substandard films. Ger. patent application B 135159 IXa/57a, dated May 5, 1941. In German.	2.00
3814-3819 PB L 82208	BAUER, E., G.M.B.H., STUTTGART, GERMANY. Projector for still pictures with slide changer. Ger. patent application B 194148, dated May 5, 1941. In German.	2.00

3820-3824 PB L 82208 — BAUER, R., G.M.B.H., STUTTGART, GERMANY. Gearing for the firs shutter in movie projectors. Ger. patent application B 194147, dated May 5, 1941. In German. 2.00

3825-3852 PB L 82208 — BOHR, R. (Inventor). Movie film in colors. Ger. patent application B 170672, dated Aug 7, 1935. In German. 4.00

3853-3898 PB L 82208 — BLONDIN, M. (Inventor). Improvements in film strips for direct observation of some and equipment for viewing strips. Ger. patent application B 168518 IXa/57a, dated Jan 31, 1935. In German. 6.00

3899-3908 PB L 82208 — BEHRENS, J. (Inventor). Equipment for taking photographs and movies in studios with a background screen. Ger. patent application, dated Dec 13, 1938. In German. 2.00

3909-3920 PB L 82208 — BLUM, C. (Inventor). Equipment for making rhythmically marked films (sound). Ger. patent application B 161728 IXa/57a, dated Jul 21, 1933. In German. 3.00
Addition to patent application B 157445 IX/57a-2.

3921-3932 PB L 82208 — BAUER, R., G.M.B.H., STUTTGART, GERMANY. Fade-over equipment for movie projectors. Ger. patent application B 186546 IXa/157a, dated Dec 9, 1940. In German. 3.00

3933-3935 PB L 82208 — JERZITSKOWSKY, J. (Inventor). Adjustable paper remover for blueprint machines. Ger. patent application J 67358 IXa/57c, dated Jun 11, 1942. In German. 2.00

3936-3939 PB L 82208 — I. G. FARBENINDUSTRIE A.G., WOLFEN, GERMANY. Equipment for the fully automatic developing of photographic papers and films in sheets. Ger. patent application I 72485, dated Jun 11, 1942. In German. 2.00

3940-3944 PB L 82208 — I. G. FARBENINDUSTRIE A. G., WOLFEN, GERMANY. Equipment for enlarging or printing of color photographs. Ger. patent application I 71861, dated Mar 23, 1942. In German. 2.00

3945-3958 PB L 82208 — INTERFOT GESELLSCHAFT STRATMANN & CO., BERLIN. Process and equipment for the developing of long, band-shaped, light-sensitive emulsions. Ger. patent application I 71776, dated Mar 13, 1942. In German. 3.00

3959-3963 PB L 82208 — I. G. FARBENINDUSTRIE A. G., WOLFEN, GERMANY. Camera with a removable photoelectric exposure meter. Ger. patent application I 68565 IXa/57a, dated Jan 13, 1943. In German. 2.00

3964-3982 PB L 82208 — KODAK A. G., BERLIN. Color compensating device for photographic printing devices. Ger. patent application K 160711, dated May 4, 1941. In German. 3.00

3983-3995 PB L 82208 — KODAK A. G., BERLIN. Method and apparatus for measuring short actions, especially for measuring the action of photographic shutters. Ger. patent application K 162603 IXa/57a, dated Oct 28, 1941. In German. 3.00

3996-4001 PB L 82208 — KODAK A. G., BERLIN. Base ranks finder especially for cameras. Ger. patent application K 159560 IXa/57a, dated Dec 11, 1942. In German. 2.00

4002-4007 PB L 82208 — KALLE A. G., WIESBADEN, GERMANY. Equipment for making blue prints. Ger. patent application K 156 494 IXa/57a, dated Nov 21, 1940. In German. 2.00

4008-4016 PB L 82208 — KODAK A. G., BERLIN. Camera for taking two different size pictures. Ger. patent application K 154623, dated Jun 2, 1939. In German. 2.00

4017-4025 PB L 82208 — KODAK A. G., BERLIN. Camera with adjustable automatic film-transport locking device. Ger. patent application dated May 31, 1939. In German. 2.00

4026-4043 PB L 82208 — KODAK A. G., BERLIN. Photographic projection printing machine for making prints and enlargements of transparencies. Ger. patent application, dated Apr 5, 1941. In German. 3.00

4044-4046 PB L 82208 — KYSING, F. (Inventor). Process for drying of wet photographic emulsions. Ger. patent application E 57560 IXa/57a, dated Aug 4, 1943. In German. 2.00

4047-4060 PB L 82208 — Centrally arranged sound system in movie theaters. Ger. patent application F 90558, dated Sep 19, 1941. In German. 3.00

4061-4062 PB L 82208 — FÖRSTER, O. (Inventor). Mirror reflex camera for 35 mm film. Ger. patent application F 91200, dated Jan 30, 1942. In German. 2.00

4063-4069 PB L 82208 — FRANKE & HEIDECK, BRAUNSCHWEIG, GERMANY. Light source for the projection of films and photoelectric equipment for the intensity control of light and film. Ger. patent application F 90392, dated Aug 14, 1941. In German. 2.00

4070-4073 PB L 82208 — FRANKE & HEIDECK, BRAUNSCHWEIG, GERMANY. Roll film camera with a re-winding device. Ger. patent application F 89545 IXa/57a, dated Apr 10, 1943. In German. 2.00

4074-4080 PB L 82208 — FOTOKOPIST G.M.B.H., BERLIN. Equipment for making equally sized reproductions from originals of different measurements. Ger. patent application F 89395 IXa/57a, dated Sep 15, 1941. In German. 2.00

4081-4095 PB L 82208 — HARRIES, WOLFGANG and KERRSLÖH, PAUL (Inventors). Equipment for running an endless roll of film. Ger. patent application H 55346, dated Sep 30, 1941. In German. 3.00

4096-4104 PB L 82208 — SANITAS G.M.B.H., BERLIN. Auxiliary equipment for taking pictures of X-ray screens. Ger. patent application H 54853, dated May 13, 1941. In German. 2.00

4105-4106 PB L 82208 — FUSBAN, A. (Inventor). Mechanism for the projection of stereoscopic movie pictures with the help of synchronous shutters. Ger. patent application F 88405 IXa/57a, dated Jan 12, 1943. In German. 2.00

4107-4109 PB L 82208 — EHLERS, J. (Inventor). Resistance circuit for electrical exposure-meters as used in cameras. Ger.

patent application B 57506, dated Jul 17, 1943. In German. 2.00

4110-4114 PB L 82208 — Device for producing and controlling sparks for the exposure of slow motion pictures. Ger. patent application B 58438 IXa/57a, dated Jul 3, 1944. In German. 2.00

4115-4131 PB L 82208 — BERNING & CO., GROSSCHÖNAU, GERMANY. Camera with sliding focal plane shutter and spring motor drive. Ger. patent application B 119603 IXa/57a, dated Sep 7, 1944. In German. 3.00

4132-4135 PB L 82208 — SEISSL, A. (Inventor). Arrangement of the photoelectric cell in built-in exposure meters of regular and movie cameras. Ger. patent application S 145737, dated Jun 14, 1941. In German. 2.00

4136-4141 PB L 82208 — SIEMENS & HALSKE, BERLIN. Method for keeping motor driven precision mechanical apparatus in operation at very low temperatures. Ger. patent application S 145860, dated Jun 23, 1941. In German. 2.00

4142-4155 PB L 82208 — SIEMENS & HALSKE A. G., BERLIN. Controlling mechanism for setting the exposure to an adjustable time-period. Ger. patent application S 143199 IXa/57a, dated Mar 4, 1942. In German. 3.00

4156-4160 PB L 82208 — SIEMENS & HALSKE, BERLIN. Device for taking pictures of X-ray screens with high-speed lens. Ger. patent application S 150811 IXa/57a, dated Aug 6, 1943. In German. 2.00

4161-4165 PB L 82208 — SACHSENWERK LICHT- & KRAFT-A.G., DRESDEN-NIEDERSEDLITZ, GERMANY. Driving gear for recording means which can be wound up on drums, reels and the like. Ger. patent application S 155 624 IXa/57a, dated May 19, 1943. In German. 2.00

4166-4167 PB L 82208 — SWIENCICKI, C. (Inventor). Vacuum flash lamp with several flash bulbs which can be fired one after the other. Ger. patent application S 156000, dated Jun 10, 1943. In German. 2.00

4168-4170 PB L 82208 — SONDOLD, H. (Inventor). Camera for single shots with container for accessories. Ger. patent application S 154226 IXa/57a, dated Feb 18, 1943. In German. 2.00

4171-4178 PB L 82208 — SOC. AN. APPARECCHI FOTOGRAFICI FERRANIA, MILAN, ITALY. Reflex camera with mirror view finder. Ger. patent application S 156756, dated Aug 2, 1943. In German. 2.00

4179-4194 PB L 82208 — SIEMENS & HALSKE, BERLIN. Reproducing apparatus which can be set according to various image sizes. Ger. patent application S 156983 IXa/57a, dated Aug 23, 1943. In German. 3.00

4195-4206 PB L 82208 — SCHÖNHALS, C. (Inventor). Photographic reproducing device. Ger. patent application Sch 122813 IXa/57a, dated Jun 28, 1941. In German. 3.00

4207-4216 PB L 82208 — Positive prints of an eight mm. sound film and projector. Ger. patent application B 197140, dated Feb 13, 1942. In German. 2.00

4217-4221 PB L 82208 — BRISCH, J. (Inventor). Photographic equipment for reproducing or printing. Ger. patent application B 198002, dated Apr 24, 1942. In German. 2.00
Addition to patent 618882.

4222-4232 PB L 82208 — BERGER, B. (Inventor). Winding device for films. Ger. patent application B 195859, dated Oct 20, 1941. In German. 3.00

4233-4239 PB L 82208 — BEMPOHL & CO., BERLIN-NEUKÖLLN. Camera with an adjustable diaphragm. Ger. patent application B 198065, dated Apr 28, 1942. In German. 2.00

4240-4244 PB L 82208 — BAUER, R., G.M.B.H., STUTTGART-UNTERTÜRKHEIM. Driving gear for winding reels. Ger. patent application B 200586, dated Dec 4, 1942. In German. 2.00

4245-4247 PB L 82208 — VEREINIGTE PHOTOKOPIER APPARATE K.G., HAMBURG, GERMANY. Printing equipment with a photoelectric exposure meter. Ger. patent application V 39657 IXa/57a, dated Feb 2, 1943. Inventor: Boeger. In German. 2.00

4248-4250 PB L 82208 — VEREINIGTE PHOTOKOPIER APPARATE K.G., HAMBURG, GERMANY. Equipment for moving a double extension in devices with an automatic focusing mechanism. Ger. patent application, dated Feb 2, 1943. Inventor: Boeger. In German. 2.00

4251-4253 PB L 82208 — VEREINIGTE PHOTOKOPIER APPARATE K.G., HAMBURG, GERMANY. Device for improving the illumination of printing equipment. Ger. patent application, dated Feb 3, 1943. Inventor: Böger. In German. 2.00

4254-4256 PB L 82208 — VEREINIGTE PHOTOKOPIER-APPARATE K.G., HAMBURG, GERMANY. Method for producing enlargements with metal vapor lamps. Ger. patent application V 39642, dated Jan 29, 1943. Inventor: Böger. In German. 2.00

4257-4261 PB L 82208 — BAUER, R., G.M.B.H., STUTTGART-UNTERTÜRKHEIM, GERMANY. Arrangement for illuminating the frame in movie equipment. Ger. patent application B 201492, dated Feb 20, 1943. In German. 2.00

4262-4266 PB L 82208 — BAUER, R., G.M.B.H., STUTTGART-UNTERTÜRKHEIM, GERMANY. Release for locking devices in movie equipment. Ger. patent application B 201662, dated Mar 6, 1943. In German. 2.00

4267-4272 PB L 82208 — BOSCH, R., G.M.B.H., STUTTGART, GERMANY. Claw movement for movie equipment. Ger. patent application B 199930, dated Oct 14, 1942. In German. 2.00

4273-4276 PB L 82208 — BAUER, R., G.M.B.H., STUTTGART-UNTERTÜRKHEIM, GERMANY. Device for adjusting the position of the frame and film-gate in movie projectors. Ger. patent application B 201789, dated Mar 18, 1943. In German. 2.00

4277-4280 PB L 82208 — BAUER, R., G.M.B.H., STUTTGART-UNTERTÜRKHEIM, GERMANY. Portable movie projector. Ger. patent application B 201790, dated Mar 18, 1943. In German. 2.00

4281-4285 PB L 82208 — BAUER, R., G.M.B.H., STUTTGART-UNTERTÜRKHEIM, GERMANY. Camera

movement, especially for projectors. Ger. patent application B 201802, dated Mar 19, 1943. In German. 2.00

4286-4289 FB L 82208 BAUER, E., G.M.B.H., STUTTGART-UNTERTURKHEIM, GERMANY. Mechanism for driving the shaft of a film winding reel. Ger. patent application B 202101, dated Apr 10, 1943. In German. 2.00

4290-4294 FB L 82208 BAUER, E., G.M.B.H., STUTTGART-UNTERTURKHEIM, GERMANY. Projector for movie films with a vertically movable sliding member which contains the Geneva movement. Ger. patent application B 202006, dated Apr 3, 1943. In German. 2.00

4295-4301 FB L 82208 BAUER, E., G.M.B.H., STUTTGART-UNTERTURKHEIM, GERMANY. Fire protecting equipment in sound movie projectors. Ger. patent application B 202008, dated Apr 5, 1943. In German. 2.00

4302-4303 FB L 82208 BACKE, H. (Inventor). Camera and protective case fitted with a writing surface. Ger. patent application B 202247, dated Apr 20, 1943. In German. 2.00

4304-4316 FB L 82208 BEHRENS, J. (Inventor). Taking of combination pictures with a rotating mirror shutter. Ger. patent application B 202176, dated Apr 14, 1943. In German. 3.00

4317-4318 FB L 82208 BEISSHART, H. (Inventor). Chest support for cameras. Ger. patent application B 205157, dated Feb 7, 1944. In German. 2.00

4319-4324 FB L 82208 BÖHNER, F. (Inventor). Method and equipment for mounting and adjusting twin-photographs or twin drawings for making stereoscopic cartoon films. Ger. patent application, dated Feb 14, 1944. In German. 2.00

4325-4326 FB L 82208 VEREINIGTE PHOTO-KOPIER APPARATE, HAMBURG, GERMANY. Camera for several image sizes. Ger. patent application B 205306 IXa/57a, dated Feb 17, 1944. Inventor: Böger. In German. 2.00

4327-4328 FB L 82208 VEREINIGTE PHOTO-KOPIER APPARATE, HAMBURG, GERMANY. Device for the illumination of reproduction equipment. Ger. patent application B 205307 IXa/57a, dated Feb 17, 1944. In German. 2.00

4329-4330 FB L 82208 VEREINIGTE PHOTO-KOPIER APPARATE, HAMBURG, GERMANY. Detachable light-source for reproduction equipment. Ger. patent application B 205308 IXa/57a, dated Feb 17, 1944. Inventor: Böger. In German. 2.00

4331-4339 FB L 82208 INTERPOT GES. STRATMANN & CO., BERLIN. Equipment for producing any number of prints from originals having different dimensions and made of different paper. Ger. patent application I 73244 IXa/57c, dated Sep 29, 1942. In German. 2.00

4340-4344 FB L 82208 Device for splicing films, strips, bands and the like. Ger. patent application T 60227 IXa/57a, dated Mar 22, 1944. In German. 2.00

4345-4351 FB L 82208 ZEISS-IKON A. G., DRESDEN, GERMANY. Daylight developing tank. Ger. patent application Z 28459 IXa/57c, dated Feb 28, 1944. In German. 2.00

4352-4367 FB L 82208 ZEISS IKON A. G., DRESDEN, GERMANY. Equipment for multicolored illumination in rooms, especially in darkrooms. Ger. patent application Z 28450 IXa/57c, dated Feb 21, 1944. In German. 2.00

4368-4372 FB L 82208 VOULAND, J. (Inventor). Fire-protection for movie films. Ger. patent application V 40465 IXa/57c, dated Sep 23, 1943. In German. 2.00

4373-4376 FB L 82208 VEREINIGTE PHOTOKOPIER APPARATE, HAMBURG, GERMANY. Photographic printer with mechanism for the transport of paper. Ger. patent application V 39511 IXa/57c, dated Dec 17, 1942. Inventor: Böger. In German. 2.00

4377-4379 FB L 82208 VEREINIGTE PHOTO-KOPIER APPARATE K.G., HAMBURG, GERMANY. Equipment for focusing of reproducing devices. Ger. patent application, dated Jul 1, 1943. Inventor: Böger. In German. 2.00

4380-4387 FB L 82208 BAUER, E., G.M.B.H., STUTTGART-UNTERTURKHEIM, GERMANY. Movie projector with universal switch. Ger. patent application B 202180, dated Apr 15, 1943. In German. 2.00

4388-4391 FB L 82208 BAUER, E., G.M.B.H., STUTTGART-UNTERTURKHEIM, GERMANY. Equipment for facilitating the formation of film loops in sound movie projectors. Ger. patent application B 202181, dated Apr 15, 1943. In German. 2.00

4392-4395 FB L 82208 BOCHNER-REKLAME UND FILM, DRESDEN, GERMANY. Process for manufacturing three-dimensional cartoon films. Ger. patent application B 205090, dated Jan 21, 1944. Inventor: Böhner. In German. 2.00

4396-4398 FB L 82208 RUNGE, O. and SELLE, WALTER (Inventors). Process for taking three-dimensional pictures. Ger. patent application B 601179, dated Jan 29, 1943. In German. 2.00

4399-4403 FB L 82208 BEHRENS, A. (Inventor). Driving gear for movie projectors. Ger. patent application B 200807, dated Dec 28, 1942. In German. 2.00

4404-4409 FB L 82208 Camera for taking multiple pictures on single films or plates. Ger. patent application B 201448, dated Feb 17, 1943. In German. 2.00

4410-4419 FB L 82208 BORAK (Inventor). Camera with a focusing view finder. Ger. patent application B 201449, dated Feb 17, 1943. In German. 2.00

4420-4443 FB L 82208 DECKEL, F. (Inventor). Adjusting mechanism for cameras with photo-electric exposure-meter. Ger. patent application D 82335, dated Mar 20, 1940. In German. 4.00

4444-4452 FB L 82208 DÖNITZ, F. (Inventor). Equipment for aerial scouting photography especially on the high sea. Ger. patent application D 82242 IXa/57a, dated Jul 18, 1942. In German. 2.00

4453-4454 FB L 82208 I. G. FARBENINDUSTRIE A. G., WOLFEN, GERMANY. Movie film with a magnetic sound track. Ger. patent application I 72751, dated Jul 16, 1942. In German. 2.00

4455-4481 PB L 82208 JANURO, H. (Inventor). Moving pictures, their production and projection. Ger. patent application J 72701, dated Jul 11, 1942. In German. 4.00

4482-4483 PB L 82208 KLANGFILM G.M.B.H., BERLIN. Wiring circuit and switching for a projection and a sound lamp in series connection. Ger. patent application K 150151 IX/57a. dated Oct 25, 1940. In German. 2.00

4484-4488 PB L 82208 KLANGFILM G.M.B.H., BERLIN. Fluid clutch for winding films. Ger. patent application K 146854 IX/57a. dated Jun 28, 1938. In German. 2.00

4489-4490 PB L 82208 I. G. FARBENINDUSTRIE A. G., WOLFEN, GERMANY. Process for increasing the efficiency of light generation in burning magnesium for long periods. Ger. patent application I 75368 IXa/57d. dated Jul 2, 1943. In German. 2.00

4491-4494 PB L 82208 INTERPOT GES. STRATMANN & CO., BERLIN. Pneumatic holder for originals in printing equipment. Ger. patent application I 75363 IXa/57a. dated Jun 28, 1943. In German. 2.00

4495-4505 PB L 82208 I. G. FARBENINDUSTRIE A. G., WOLFEN, GERMANY. Equipment for the reversing process of color negatives. Ger. patent application I 75173, dated May 22, 1943. In German. 3.00
Addition to patent 715240.

4506-4510 PB L 82208 INTERPOT GES. STRATMANN & CO., BERLIN. Magazine for papers in printing equipment. Ger. patent application I 75183, dated Jun 2, 1943. In German. 2.00

4511-4516 PB L 82208 I. G. FARBENINDUSTRIE A. G., WOLFEN, GERMANY. Continuous printing machine for color film. Ger. patent application, dated Oct 8, 1942. In German. 2.00

4517-4522 PB L 82208 Single exposure roll film camera. Ger. patent application B 115007 IXa/57a. dated Jun 5, 1944. In German. 2.00

4523-4526 PB L 82208 Projector for various film sizes, especially substandard films. Ger. patent application W 112230, dated Dec 15, 1942. In German. 2.00
Addition to patent application W 112137 IXa/57a.

TRANSPORTATION EQUIPMENT

PB L 83389. REICHSPATENTAMT, BERLIN. German patent applications, class 20: Railway equipment. (FIAT Microfilm reel C 82, Frames 6581-6922). 1938-1944. 342f. Price: Microfilm -$7.00 - Enlargement print -$36.00. This reel contains 53 patent applications as listed below. Individual items will be available as enlargement prints only; the entire reel may be purchased in microfilm form for $7.00. Please include PB and frame numbers when ordering individual items. In German.

Frames	Title	Price
6581-6587 PB L 83389	JAKOBS, H. (Inventor) Center bumper for mine cars. German patent application J 76003, dated Oct 8, 1943. In German.	$2.00
6588-6595 PB L 83389	KRUCKENBERG, F. (Inventor) Hydromechanical drive for locomotives. German patent application K 164477, dated Apr 20, 1942. In German. Drawing.	2.00
6596-6604 PB L 83389	KRUPP, FRIEDR. A.G., ESSEN. Locomotive with turbine drive. German patent application K 164667, dated May 11, 1942. In German. Drawings.	2.00
6605-6620 PB L 83389	KOHN - SHUENFELDER MASCHINENBAU AUSTALT G.M.B.H. COLOGNE. Pusher device for mine cars. German patent application K 159700, dated Dec 30, 1940. In German. Supplement to patent application K 153 979.	3.00
6621-6627 PB L 83389	KRUPP, FRIEDR., A.G., ESSEN. Diesel locomotive with at least two transformer-equiped drives. German patent application K 161278, dated Jun 3, 1941. In German. Diagram.	2.00
6628-6633 PB L 83389	KRUPP, FRIEDR., A.G., ESSEN. Dual track heavy-duty railway system and equipment. German patent application K 166 870, dated Dec 21, 1942. In German. Drawings.	2.00
6634-6645 PB L 83389	KÜRTOSSY, L. (Inventor) Combination car and cable coupling. German patent application K 158369, dated Aug 8, 1940. In German. Drawings.	3.00
6646-6656 PB L 83389	KÖHLER, H. (Inventor) Railroad air conditioning and refrigeration equipment. German patent application K 166701, dated Dec 1, 1942. In German. Drawings.	3.00
6657-6664 PB L 83389	KAAL, W. (Inventor) Magnetic spring arrangement for railway trucks. German patent application dated Feb 6, 1942. In German. Drawings.	2.00
6665-6674 PB L 83389	KOHLMANN & ZEISSER METALLWARENFABRIK, ILMENAU. Wheel-operated contact device. German patent application K 162040, dated Aug 27, 1941. In German. Drawings.	2.00
6675-6679 PB L 83389	KÜRTH, R. (Inventor) Automatic temperature control for refrigerated railway cars. German patent application K 149 186, dated Jan 14, 1938. In German. Diagram.	2.00
6680-6688 PB L 83389	KLAEVKE, H. (Inventor) Circuit for track switch and signal equipment. German patent application K 148809, dated Dec 16, 1938. In German. Wiring diagrams.	2.00
6689-6691 PB L 83389	KRÄMER, H. (Inventor) Coupling for railway cars. German patent application K 161820, dated Jul 30, 1941. In German. Drawings.	2.00
6692-6701 PB L 83389	KRUCKENBERG, F. AND STEDEFELD, C. (Inventors) High-speed railway system. German patent application K 162501, dated Oct 17, 1941. In German. Diagrams.	2.00
6702-6715 PB L 83389	KURTOSSY, L (Inventor) Automatic coupling for railway cars. German patent application K 157274, dated Apr 18,	

1940. In German. 3.00
Drawings. Sup. to Pat. appl. U 13510.

6716-6725 PB L 83389 Auxiliary wheel arrangement for street cars. German patent application K 160 006, dated Jan 31, 1941. In German. 2.00
Supplement to patent application 687558.

6726-6728 PB L 83389 KRAUS, A. (Inventor) Drop-board for use as a table or support. German patent application K 166573, dated Nov 21, 1942. In German. 2.00
Drawing.

6729-6732 PB L 83389 KRAUS, A. (Inventor) Automatic drop-board. German patent application K 166 742, dated Dec 7, 1942. In German. 2.00
Drawings.

6733-6746 PB L 83389 KRUPP (FRIEDR.) A.G., ESSEN. Bilateral tipping mechanism for dump cars. German patent application K 162962, dated Nov 29, 1941. In German. 3.00
Drawings.

6747-6750 PB L 83389 Windshield wiper for locomotives. German patent application K 162884, dated Nov 25, 1941. In German. 2.00

6751-6753 PB L 83389 MASCHINENFABRIK AUGSBURG NÜRNBERG A.G. AUGSBURG. Turntable. German patent application M 158088, dated Jul 6, 1943. In German. 2.00
Drawing.

6754-6757 PB L 83389 MILDE, H. (Inventor) Tipping mechanism for dump cars. German patent application M 157495, dated Apr 24, 1943. In German. 2.00
Diagram.

6758-6760 PB L 83389 Screen door for railway cars. German patent application M 156820, dated Feb 17, 1943. In German. 2.00

6761-6764 PB L 83389 MASCHINENFABRIK ESSLINGEN, ESSLINGEN. Signal repetition blocking mechanism. German patent application M 156711, dated Feb 8, 1943. In German. 2.00

6765-6769 PB L 83389 MÜLLER GEBR. K.G., REISCHÜTZ. Automatic coupling for railway cars. German patent application M 157928, dated Jun 17, 1943. In German. 2.00
Drawing.

6770-6774 PB L 83389 MAZZA, G. (Inventor) Suspension for cable railways. German patent application M 157902, dated Jun 6, 1943. In German. 2.00

6775-6783 PB L 83389 PREUSS, H. (Inventor) Articulated railway car. German patent application P 85709, dated Feb 23, 1943. In German. 2.00
Drawing.

6784-6790 PB L 83389 PINTSCH (Inventor) Trouble-shooting circuit for railway signal systems. German patent application P 81489, dated Apr 9, 1941. In German. 2.00
Wiring diagrams.

6791-6801 PB L 83389 KELLEIN, R. (Inventor) Equipment for re-mounting derailed cars. German patent application K 169763, dated Oct 2, 1943. In German. 2.00
Drawings.

6802-6808 PB L 83389 KNORR, BREMSE A.G., BERLIN. Stopcock for air brake lines. German patent application K 169945, dated Oct 25, 1943. In German. 2.00
Drawing.

6809-6812 PB L 83389 KNORR BREMSE A.G., BERLIN. Stopcock for air brake lines. German patent application K 169946, dated Oct 25, 1943. In German. 2.00
Drawing.

6813-6815 PB L 83389 KAUFMEIER, W. (Inventor) Axle-bearing lubrication for railway cars. German patent application K 169609, dated Sep 13, 1943. In German. 2.00
Drawings.

6816-6819 PB L 83389 KNORR BREMSE A.G., BERLIN. Disk brake system for railroads. German patent application K 169221, dated Jul 29, 1943. In German. 2.00
Diagrams.

6820-6824 PB L 83389 KNORR BREMSE A.G. BERLIN. Brake system for trains with cars equipped with internal expanding brakes or with block brakes. German patent application K 168 333, dated Apr 30, 1943. In German. 2.00
Diagrams.

6825-6831 PB L 83389 KNORR BREMSE A.G., BERLIN. Electromagnetic brake for high-speed railways. German patent application K 168413, dated May 10, 1943. In German. 2.00
Drawings.

6832-6837 PB L 83389 KÖPPEL, E. (Inventor) Pusher device for railway cars. German patent application K 167744, dated Mar 5, 1943. In German. 2.00
Drawings.

6838-6842 PB L 83389 KLOTZBACK, G. (Inventor) "Brake block." German patent application K 168897, dated Jun 24, 1943. In German. 2.00
Drawings.

6843-6847 PB L 83389 KRUPP, FRIEDR., A.G., ESSEN. Railway truck adaptable for various gage tracks. German patent application K 168789, dated Jun 15, 1943. In German. 2.00

6848-6853 PB L 83389 KLEIN, K. (Inventor) Conveyor system, especially for bulk materials. German patent application K 168671, dated Jun 1, 1943. In German. 2.00

6854-6861 PB L 83389 KRÄTZSCHMAR, H. (Inventor) Coupling device for railway cars, truck trailers, etc. German patent application K 168 652, dated May 31, 1943. In German. 2.00
Drawings.

6862-6866 PB L 83389 KNORR BREMSE A.G., BERLIN. Automtic safety valve for air brake. German patent application K 168729, dated Jun 9, 1943. In German. 2.00
Drawing.

6867-6869 PB L 83389 KOLATEK, F. (Inventor) Automatic coupling for railway cars. German patent application K 168709, dated Jun 7, 1943. In German. 2.00
Drawings.

6870-6873 PB L 83389 KRUPP, FRIEDR., A.G., ESSEN. Wheel hub with antifriction bearings especially for narrow gage or mine railway cars. German patent application K 168701, dated Jun 5, 1943. In German. 2.00
Drawing.

6874-6881 PB L 83389 KRUPP, FRIEDR., A.G., ESSEN. Turbo-locomotive with mechanical power transmission. German patent application K 167691, dated Feb 27, 1943. In German. 2.00
Drawings.

6882-6885 PB L 83389 KRÜGER, J. (Inventor) Wheel-rim lubricating device. German patent application K 169394, dated Aug 14, 1943. In German. 2.00

6886-6891 PB L 83389 KRUPP, FRIEDR., A.G., BERLIN. Frame for railway cars. German patent application K 169375, dated Aug 12, 1943. In German. 2.00

6892-6894
PB L 83389 KUTSCHBACH, H. (Inventor) Pneumatic stabilizer system for rail and other vehicles. German patent application K 169843, dated Oct 14, 1943. In German. Drawings. 2.00

6895-6897
PB L 83389 KUTSCHBACH, H. (Inventor) Pneumatic or hydraulic stabilizer system for rail and other vehicles. German patent application K 169846, dated Oct 15, 1943. In German. Diagram. 2.00

6898-6900
PB L 83389 KNORR BREMSE A.G., BERLIN. Electrically controlled air brake. German patent application K 169896, dated Oct 20, 1943. In German. Drawing. 2.00

6901-6908
PB L 83389 SIEMENS SCHUKERTWERKE A.G., BERLIN. Controller for trolley buses. German patent application S 152549, dated Oct 22, 1942. In German. 2.00

6909-6914
PB L 83389 SIEMENS SCHUKERTWERKE A.G. BERLIN. Heating system for electric railways. German patent application S 146418, dated Oct 23, 1942. In German. Diagram. 2.00

6915-6917
PB L 83389 BRAUNSCHWEIGISCHE KOHLENBERGWERKE, HELMSTEDT. Railway signal system. German patent application B 205379, dated Feb 14, 1944. In German. 2.00

6918-6922
PB L 83389 CONTINENTAL GUMMI WERKE A.G., HANNOVER. Journal bearing for railway cars. German patent application C 55705, dated Mar 21, 1940. In German. Drawings. 2.00

MISCELLANEOUS

PB L 82209. DECKEL, FRIEDRICH, MUNICH, GERMANY. Camera shutters and miscellaneous patent applications. (FIAT Microfilm Reel C-129, Frames 1334-2208; frames 1869-1892 are missing). 1937-1946. 851 f. Price: Microfilm-$7.00 - Enlargement print-$87.00
This FIAT microfilm reel consists of specifications for Compur Rapid camera shutters and patent applications for photographic equipment, mechanical projectile fuses and machine tool accessories as listed below. Individual items will be available as enlargement prints only; the entire reel may be purchased in microfilm form for $7.00. Please include PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
1334-1779 PB L 82209	Compur Rapid camera shutters size 0 and 00. Technical data and specifications. Ger. patent application dated 1945-1946. In German.	$46.00
1780-1803 PB L 82209	Arrangement for regulating and measuring the time delay of standard mechanical time fuses. Ger. patent application not dated. In German. Drawings.	4.00
1804-1814 PB L 82209	Camera shutter of very small dimensions. Ger. patent application D 23 596 Gm 57a dated Jan 25, 1945. In German. Drawings.	3.00
1815-1822 PB L 82209	Photoelectric exposure meter. Ger. patent application D 24 198 Gm 42h dated Nov 13, 1944. In German. Drawings.	2.00
1823-1836 PB L 82209	Focusing arrangement for photographic apparatus with photoelectric exposure meters. Ger. patent application not dated. In German. Drawings.	3.00
1837-1852 PB L 82209	Device for sorting workpieces according to more than one tolerance range. Ger. patent application not dated. In German. Drawings.	3.00
1853-1860 PB L 82209	Adjustment mechanism for exposure-determining values on cameras. Ger. patent application not dated. In German. Drawings.	2.00
1861-1868 PB L 82209	Camera with a built-in exposure meter. Ger. patent application dated Mar 11, 1938. Inventor: Heidelberg, V. In German. Drawings.	2.00
1869-1892 PB L 82209	These frames are missing.	
1893-1898 PB L 82209	Device for regulating and measuring the time delay of mechanical time fuses. Ger. patent application D 91 859, n.d. In German. Drawings.	2.00
1899-1907 PB L 82209	Adjustment for cameras with photoelectric exposure meters. Ger. patent application D 86 552, n.d. In German. Supplement to patent application D 82 355. Drawings.	2.00
1908-1918 PB L 82209	Testing device for parts of projectile fuses. Ger. patent application D 91 702, n.d. In German. Drawings.	3.00
1919-1942 PB L 82209	Adjustment for cameras with photoelectric exposure meters. Ger. patent application D 82 355, n.d. In German. Drawings.	4.00
1943-1955 PB L 82209	Indicating and controlling device with optical transmission. Ger. patent application D 81 897 dated Jan 16, 1940. In German. Drawings.	3.00
1956-1968 PB L 82209	Camera shutter with a contactor for electric flashlight release. Ger. patent application D 84 501, n.d. In German. Drawings.	3.00
1969-1989 PB L 82209	Standard gage. Ger. patent application dated Nov 22, 1940. In German. Drawings and photographs.	4.00
1990-1996 PB L 82209	Camera shutter with protection against stray light. Ger. patent application D 23 648 Gm 57a dated Feb 8, 1945. In German. Drawings.	2.00
1997-2004 PB L 82209	Projector, especially for series measurements. Ger. patent application D 23 597 Gm 42b dated Jan 26, 1945. In German. Drawings.	2.00
2005-2018	Camera shutter. Ger. patent	

PB L 82209 application D 83 506, n.d. In German. 3.00
Supplement to patent application D 81 855 IX 57a. Drawings.

2019-2027 PB L 82209 Camera shutter. Ger. patent application D 83 505, n.d. In German. 2.00
Supplement to patent application D 81 855 IXa 57a. Drawings.

2028-2035 PB L 82209 Vertical drilling machine. Ger. patent application not dated. In German. 2.00
Drawings.

2036-2043 PB L 82209 Flexibly supported tracing arm for automatic profiling machines. Ger. patent application D 83 783 Ib/49b, n.d. In German. 2.00
Supplement to patent application D 74 536 I/49b.

2044-2050 PB L 82209 Method for indexing the workpiece support of machine tools, especially drills. Ger. patent application not dated. In German. 2.00
Drawings.

2051-2057 PB L 82209 Method for grinding circular curved surfaces on cylinder parts. Ger. patent application D 90 536 XII dated Apr 24, 1943. In German. 2.00
Drawings.

2058-2064 PB L 82209 Fixture for gears or the like for burr removal. Ger. patent application D 92 530 Ib/49d, dated Jan 28, 1940. In German. 2.00
Drawings.

2065-2070 PB L 82209 Machine for testing helical springs. Ger. patent application not dated. In German. 2.00
Drawings.

2071-2077 PB L 82209 Arrangement for machining, especially milling helical edges on workpieces. Ger. patent application not dated. In German. 2.00
Drawings.

2078-2086 PB L 82209 Locking device for automatic profiling machines. Ger. patent application not dated. In German. 2.00
Drawings.

2087-2097 PB L 82209 Lapping machine (with several tool spindles and axially moved work pieces). Ger. patent application not dated. In German. 3.00
Drawings.

2098-2103 PB L 82209 Device for removing stress from workpieces with threaded parts. Ger. patent application not dated. In German. 2.00
Drawings.

2104-2110 PB L 82209 Flexibly supported tracing arm for automatic profiling machines. Ger. patent application not dated. In German. 2.00
Drawings.

2111-2123A PB L 82209 Duplicating grinder. Ger. patent application D 88 992, n.d. In German. 3.00
Drawings.

2124-2129 PB L 82209 Device for fixing workpieces or the like on fixtures, e.g., machine tables. Ger. patent application not dated. In German. 2.00
Drawings.

2130-2142 PB L 82209 Flexibly supported tracing arm for manually controlled profiling machines. Ger. patent application not dated. In German. 3.00
Addition to patent application D 74 536 I/49b. Drawings.

2143-2149 PB L 82209 Device for workpiece rotation on machine tools for machining grooves. Ger. patent application dated Jul 26, 1941. In German. 2.00
Drawings.

2150-2162 PB L 82209 Device for removing burrs from gears or the like. Ger. patent application not dated. In German. 3.00
Drawings.

2163-2167 PB L 82209 Device for adjusting a workpiece for the purpose of machining grooves. Ger. patent application dated Jun 8, 1938. In German. 2.00
Addition to patent application D 75 882 XII/67a. Drawings.

2168-2173 PB L 82209 Device for adjusting a workpiece on machine tools for machining grooves. Ger. patent application D 78 114 dated Jun 1, 1938. In German. 2.00
Addition to patent application D 75 882 XII/67a. Drawings.

2174-2181 PB L 82209 Automatic profiling machine. Ger. patent application not dated. In German. 2.00
Addition to patent application D 74 944 XII/75a. Drawings.

2182-2186 PB L 82209 Tailstock center with transverse adjustment. Ger. patent application D 78 954 I/49a dated Jun 17, 1939. In German. 2.00
Drawings.

2187-2197 PB L 82209 Method for aligning the workpiece machine tools. Ger. patent application D 75 047 dated Apr 10, 1937. In German. 3.00
Drawings.

2198-2208 PB L 82209 Device for milling circles and ellipses. Ger. patent application D 82 951 dated Jul 15, 1940. In German. 3.00
Drawings.

PB L 82209-S. DECKEL, FRIEDRICH, MUNICH, GERMANY.
Camera shutters and miscellaneous patent applications.
(FIAT Microfilm Reel O-129, Frames 1334-2208, abstract cards)
1937-1946. 41 p. Price: Microfilm-$2.00 - Photostat-$5.00
Abstract cards of individual items in FIAT Microfilm Reel O-129, PB 82209, prepared by FIAT personnel in Germany.

REGISTER OF PATENTS AVAILABLE FOR LICENSING OR SALE

Information on the following patents can be obtained from the U. S. Patent Office, Washington 25, D. C.

The "Groups" appearing after the patent abstracts are based on the Standard Industrial Classification Manual, Vol. I, Manufacturing Industries, Executive Office of the President, Bureau of the Budget.

Official Gazette, March 2, 1948

The United Shoe Corporation of 140 Federal St., Boston 10, Mass., has placed 186 patents on the Register of Patents as available for license, in addition to the 2,092 patents previously registered by this corporation. 138 of the patents cover shoe machinery, the remaining 48 being useful in various other fields which include sewing machines, parts, and attachments; sorting machines; and devices such as finishing tools and brush structures. Abstracts of these 186 patents will be published in groups in the Official Gazette from March 2 to March 16 inclusive.

Shoe Machinery (Group 35-59)

PAT. 1,869,434. Edge trimmer and the like. Patented Aug 2, 1932.
A machine for trimming the edges of shoe soles. A pair of power driven, equally and oppositely movable, rotary presser members guide and feed the edge of the shoe sole to a rotating, cup-shaped edge trimming knife. The width to which the sole margin is to be trimmed is determined by adjusting one of the presser members. Reg. No. 9,171.

PAT. 1,872,441. Fastener inserting machine. Patented Aug 16, 1932.
Relates to a machine for inserting lacing hooks. A movable anvil, by which the hooks are transferred from a raceway and inserted in the work, has adjustable devices by which the movement of the anvil to the raceway and its hook inserting movement may be each individually regulated without affecting the other. Means are also provided for supplying pieces of reinforcing material at the points where the hooks are inserted. Reg. No. 9,172.

PAT. 1,881,656. Finishing machine. Patented Oct 11, 1932.
A finishing machine having means for supporting an edge setting tool for swinging movement about a virtual axis in proximity to its work-engaging face. Reg. No. 9,173.

PAT. 1,882,005. Shoe stiffener conditioning machine. Patented Oct 11, 1932.
An apparatus for tempering or conditioning box toe stiffeners. The stiffeners are placed upon a carrier normally held elevated, by a weight, above a receptacle containing a conditioning liquid. The carrier is depressed manually to immerse the stiffeners in the liquid and then released, whereupon the weight gradually returns it to its normal elevated position. Reg. No. 9,174.

PAT. 1,884,674. Apparatus for conditioning parts of shoes. Patented Oct 25, 1932.
Relates to apparatus for spraying hot, moist vapor upon the breast and both surfaces of an unlayed breast flap of a Louis-heeled shoe. The shoe, with the breast flap held away from the heel breast, is supported over a chamber in which are two spray nozzles, one directed at the grain face of the flap and the other directed between the breast flap and the heel breast. Reg. No. 9,175.

PAT. 1,891,263. Machine for operating on lasts. Patented Dec 20, 1932.
A machine for assembling in a shoe the two parts of the last disclosed in Patent 1,856,127. The heel part of the last is supported upon a jack pin, and treadle operated devices effect first a relative tilting movement and then a relative sliding movement between the forepart and the heel part, to assemble the last. Reg. No. 9,176.

PAT. 1,891,274. Method of and system for tempering material. Patented Dec 20, 1932.
The tempering of shoe parts is controlled automatically by the action of a test piece of the same material mounted in the tempering chamber and connected to a valve for releasing the tempering fluid from the chamber when the test piece has become sufficiently flexible. Reg. No. 9,177.

PAT. 1,897,046. Fastener supplying mechanism. Patented Feb 14, 1933.
Relates to mechanism for intermittently rotating a bladed disk for discharging lacing hooks from a hopper into a raceway. The disk is yieldingly driven by a double acting ratchet and pawl couple but is positively arrested whenever one of the blades is brought into register with the raceway. Reg. No. 9,178.

PAT. 1,897,526. Automatic edge trimmer. Patented Feb 14, 1933.
A shoe is supported in a jack and automatically moved to transfer the point of operation along the edge of the shoe sole under the control of a template secured to the sole. Reg. No. 9,179.

PAT. 1,904,313. Fastening inserting machine. Patented Apr 18, 1933.
A machine for nailing on rubber heels arranged to permit use of the nail driver for positioning the work. Reg. No. 9,180.

PAT. 1,904,314. Fastening inserting machine. Patented Apr 18, 1933.
A machine for inserting staples through a shank piece, having means for locating work to aline openings in the shank piece with the staple driver. Reg. No. 9,181.

PAT. 1,908,356. Machine for operating on lasts. Patented May 9, 1933.
A machine for disassembling the two parts of the last disclosed in Patent 1,856,127. A fixed abutment engages the forepart of the last while a movable jack pin, which is clutched to the heel part, first tilts the heel part and then exerts a positive downward pull thereon, to separate it from the forepart. Reg. No. 9,182.

PAT. 1,908,914. Inseam trimming machine. Patented May 16, 1933.
The edge of a cup-shaped inseam trimming cutter is scalloped to provide a series of openings through which a vibrating welt beating tool operates so that the welt is beaten out and the inseam is pounded out at the same time that it is trimmed. Reg. No. 9,183.

PAT. 1,913,437. Shoe support. Patented Jun 13, 1933.
A support for the toe end of a shoe, comprising a rubber fluid container within a holder and a flexible non-elastic cover. Reg. No. 9,184.

PAT. 1,919,740. Edge setting machine. Patented Jul 25, 1933.
An automatic machine for setting the edge of the sole of a shoe supported on a jack which is movable to transfer the point of operation of the tool along the edge of the sole, and having two setting tools with means for automatically changing from one tool to the other. Reg. No. 9,185.

PAT. 1,920,501. Trimming machine. Patented Aug 1, 1933.
A machine for trimming the insole rib and surplus upper materials of a staple lasted shoe. A treadle operated, vertically movable gage against which the shoe bottom is held, permits a horizontally moving trimming knife to cut above or below the line of staples, as desired, during the progress of the trimming operation. Reg. No. 9,186.

PAT. 1,921,058. Manufacture of boots and shoes. Patented Aug 8, 1933.
A machine for accurately applying location marks, such as jig holes, to tips and vamps. Reg. No. 9,187.

PAT. 1,921,165. Edge trimming machine. Patented Aug 8, 1933.
A shoe is supported in a jack and automatically moved to transfer the point of operation along the edge of the shoe sole under the control of a template secured to the sole and an adjustable guide bearing against the template, a gage being provided for positioning the guide relatively to the point of operation upon the shoe. Reg. No. 9,188.

PAT. 1,922,137. Sole molding machine. Patented Aug 15, 1933.
A machine for molding the toe ends of the soles of turn shoes, after they have been mounted on lasts, including a mold which is self-adjustable to accommodate different shapes and sizes. Reg. No. 9,189.

PAT. 1,923,167. Shoe treating apparatus. Patented Aug 22, 1933.
A shoe transporting conveyor moves along the open mouth of a chamber in which fluid for tempering the toe portions of shoes on the conveyor is circulated. At the delivery end of the conveyor mechanism actuated by the foremost shoe causes the conveyor to stop if the shoe is not removed. Reg. No. 9,190.

PAT. 1,925,210. Apparatus for treating shoe parts or the like. Patented Sep 5, 1933.
An apparatus for tempering shoe upper parts. The work pieces are placed in wire baskets upon inclined shelves in a chamber in which heated water vapor is circulated, movable dampers adjacent to the shelves controlling the circulation and distribution of the vapor. Reg. No. 9,191.

PAT. 1,935,863. Shoe finishing machine. Patented Nov 21, 1933.
A finishing machine adapted to be associated with a constantly rotating shaft and having a tool holder, means for oscillating the tool holder from the shaft, and a clutch for connecting the oscillating means to the tool holder. Reg. No. 9,192.

PAT. 1,937,819. Finishing machine. Patented Dec 5, 1933.
A finishing machine including a tool holder adapted to be substituted for a Naumkeag pad and having an oscillating tool carrier arranged to allow any one of a plurality of tools to be brought into operative position. Reg. No. 9,193.

PAT. 1,943,308. Heel finishing machine. Patented Jan 16, 1934.
An automatic machine for finishing the heels of shoes, having a turret with a plurality of shoe supporting jacks and a plurality of working stations with different types of finishing tools. Reg. No. 9,194.

PAT. 1,943,429. Fastening inserting machine. Patented Jan 16, 1934.
A heel seat pegging machine having an awl for forming holes for fastenings and movable to feed the work, provided with means for partially withdrawing the awl before the feed movement. Reg. No. 9,195.

PAT. 1,947,589. Fastening inserting machine. Patented Feb 20, 1934.
A hand tacker provided with means arranged to permit driving tacks with their heads either flush or upstanding. Reg. No. 9,196.

PAT. 1,950,554. Fastening inserting machine. Patented Mar 13, 1934.
A fastener inserting machine having an awl and operating means for the awl including a latch arranged to be released when the awl meets excessive resistance. Reg. No. 9,197.

PAT. 1,963,169. Machine for, and method of, inserting fastenings. Patented Jun 19, 1934.
A paper peg inserting machine having a knife for slitting the end of a peg before it is driven. Reg. No. 9,198.

PAT. 1,966,727. Channel closing and edge compacting machine. Patented Jul 17, 1934.
A machine for closing channels in, and compacting the edges of, shoe soles, having means for engaging a sole to hold it from spreading under the action of the compacting means. Reg. No. 9,199.

PAT. 1,973,065. Trimming machine. Patented Sep 11, 1934.
A machine for cutting off the projecting ends of a rand flush with the breast face of a heel base. A yieldable table supports the heel base with its breast face against a power operated cutter which severs the end of the rand but is capable of yielding if it encounters a misplaced heel base, to prevent severing the base. Reg. No. 9,200.

PAT. 1,974,487. Trimming machine. Patented Sep 25, 1934.
An inseam trimming machine provided with an auxiliary cutter which automatically snips the long strip of severed waste material into short sections, to facilitate its discharge into a waste-pipe. Reg. No. 9,201.

PAT. 1,975,460. Lasting apparatus. Patented Oct 2, 1934.
A device for clamping the upper of a stitchdown shoe to a last, having a stem for entering the last pin hole and means for engaging the forepart of the upper to press it against the last. Reg. No. 9,202.

PAT. 1,979,409. Fastening inserting machine. Patented Nov 6, 1934.
Staple forming and driving mechanism having a deflector and a staple-transferring device provided with guide portions extending substantially to the deflector. Reg. No. 9,203.

PAT. 1,981,037. Fastening inserting machine. Patented Nov 20, 1934.
A fastener inserting machine having a driver and an anvil with cavities for making staples with helically clenched legs. Reg. No. 9,204.

PAT. 1,981,062. Shoe machine. Patented Nov 20, 1934.
An adjustable column for a shoe machine having a treadle connection which automatically changes its length as the column is shortened or lengthened. Reg. No. 9,205.

PAT. 1,981,944. Trimming machine. Patented Nov 27, 1934.
An inseam trimming machine employing a band knife which runs on small rolls arranged to form a bend of short radius in the operating portion of the knife, causing the latter to curve away from and clear the upstanding materials at the opposite side of the shoe. Especially useful with narrow shank shoes. Reg. No. 9,206.

PAT. 1,982,740. Edge burnishing machine. Patented Dec 4, 1934.
An edge setting machine having a tool carrier and a tool holder mounted in the carrier so that different surfaces of a tool may be selectively presented to operative position. Reg. No. 9,207.

PAT. 1,983,635. Finishing machine. Patented Dec 11, 1934.
Mechanism for supplying pellets of wax to the edge setting tool of an automatic edge setting machine, also covers a tool having a recess to receive pellets of wax. Reg. No. 9,208.

PAT. 1,986,923. Fastening inserting machine. Patented Jan 8, 1935.
A fiber peg inserting machine having an awl and fluid pressure means for operating the awl arranged to permit escape of fluid pressure when the awl meets a predetermined resistance. Reg. No. 9,209.

PAT. 1,986,932. Fastening inserting machine. Patented Jan 8, 1935.
A fiber peg inserting machine arranged to drive fastenings that are headed flush with the surface of the work. Reg. No. 9,210.

PAT. 1,993,953. Finishing machine. Patented Mar 12, 1935.
A finishing machine having a rotary tool and means for heating the tool that is movable to and from heat exchanging position relative to the tool. Reg. No. 9,211.

PAT. 1,996,853. Fastening inserting machine. Patented Apr 9, 1935.
A staple forming and driving machine having means for obliquely cutting ends of staple legs and, thereafter, deflecting them in substantially parallel planes at right angles to the staple crossbar. Reg. No. 9,212.

PAT. 2,000,961. Finishing machine. Patented May 14, 1935.
An edge setting machine having an oscillating tool and provided with means for varying the amplitude of oscillation of the tool. Reg. No. 9,213.

PAT. 2,005,104. Machine for operating upon shoes. Patented Jun 18, 1935.
An automatic machine having a shoe supporting jack movable to transfer the point of operation about the shoe, the movement of the jack being guided by feeler mechanism engaging a marginal contour surface fixed with relation to the shoe to control tipping and turning movements of the shoe. Reg. No. 9,214.

PAT. 2,006,452. Machine for inserting fastenings. Patented Jul 2, 1935.
A paper peg inserting machine having means for imparting a hammer blow to the work, immediately prior to the insertion of a peg. Reg. No. 9,215.

PAT. 2,011,683. Fastening inserting machine. Patented Aug 20, 1935.
A staple driving machine having means for interrupting the feed of the wire if a staple is not fully expelled. Reg. No. 9,216.

PAT. 2,013,046. Heel finishing machine. Patented Sep 3, 1935.
An automatic heel finishing machine having an indenting tool which is pivotally supported, and novel means for jacking the shoe to facilitate the indenting operation. Reg. No. 9,217.

PAT. 2,019,573. Fastening inserting machine. Patented Nov 5, 1935.
A paper peg inserting machine having a driver bar and a driver connected to the bar with lost motion to permit continued movement of the driver after the bar has stopped. Reg. No. 9,218.

PAT. 2,023,549. Creasing and burnishing machine. Patented Dec 10, 1935.
A machine for creasing and edge burnishing straps, or the like, having a feed roll, a creasing wheel and an oscillating burnishing tool. Reg. No. 9,219.

PAT. 2,028,840. Fastening inserting machine. Patented Jan 28, 1936.
A staple forming and driving machine having means for deflecting the point of one leg of a staple after it has been formed and before it is driven. Reg. No. 9,220.

PAT. 2,029,533. Method of, and apparatus for, operating on the sole edges of rubber soled shoes. Patented Feb 4, 1936.
A method of, and machine for, closing the edges of the soles of rubber shoes, having a rotary tool provided with a spiral rib and arranged to beat the edge of the sole. Reg. No. 9,221.

PAT. 2,034,752. Fastening inserting machine. Patented Mar 24, 1936.
A paper peg inserting machine having operating mechanism including a toggle arranged to be broken to withdraw the peg inserting tool after a hole has been formed. Reg. No. 9,222.

PAT. 2,035,080. Fastening inserting machine. Patented Mar 24, 1936.
A paper peg inserting machine having an operating mechanism including a member yieldingly connected to the peg inserting tool to permit withdrawal of the tool after a hole has been formed. Reg. No. 9,223.

PAT. 2,036,352. Fastener supplying apparatus. Patented Apr 7, 1936.
A flexible raceway for eyelets or rivets. The raceway is made from a strip of sheet metal bent to form a clencher cross-section and made flexible by cutting transverse kerfs through the inturned margins and the U-shaped portions of the bends. Reg. No. 9,224.

PAT. 2,042,378. Shoe bottom attaching apparatus. Patented May 26, 1936.
A press for use in cement attaching soles to shoes. A pad box contains an annular, inflatable pad for applying pressure to a shoe sole and supports an overhead yoke by which a sole extension support is sustained. Reg. No. 9,225.

PAT. 2,043,369. Shoe roughing machine. Patented Jun 9, 1936.
A rotary roughing tool is positioned partly within a bowl-shaped work rest which is freely rotatable about an axis at right angles to that of the tool, and is adjustable in an arc concentric with the axis of the tool. Reg. No. 9,226.

PAT. 2,044,054. Trimming machine. Patented Jun 16, 1936.
A toe trimming machine designed to utilise a short portion of a long, flexible strip-knife the major portion of which is kept in two coils from one of which the knife is unwound little by little as sharp portions are needed and on the other of which the dulled portions are wound. Reg. No. 9,227.

PAT. 2,046,443. Heel building machine. Patented Jul 7, 1936.
The bottom of a mold in which heels are built consists of a nail block which moves upward to eject a completed heel from the mold and present the block in a convenient position to receive the nails for the next heel. A power operated presser pad which is movable into and out of register with the mold is controlled by a safety device which prevents power operation of the pad when it is not in register with the mold. Reg. No. 9,228.

PAT. 2,052,659. Fastening inserting machine. Patented Sep 1, 1936.
A staple driving and forming mechanism having a rotatable die for severing wire and transferring it into driving position. Reg. No. 9,229.

PAT. 2,053,469. Machine for lacing shoe uppers. Patented Sep 8, 1936.
A lacing machine in which a plurality of spring actuated loopers act successively to complete the formation of a loop on one spindle before one is started on the next spindle, and so on. Thus there is only one reeving bend in the thread at a time, the thread passing freely through the other spindles and less strain being imposed on the thread than when all the loops are formed simultaneously. Reg. No. 9,230.

PAT. 2,054,170. Heel-setting means. Patented Sep 15, 1936.
A machine for setting a removable clamp upon an assembled heel and shoe. Preliminary pressure is applied by a treadle and final pressure by a power operated cam. The clamp equalizes pressure on the top lift and back of the heel and a flap-engaging member applies pressure to the breast flap. Reg. No. 9,231.

PAT. 2,056,316. Controlling mechanism. Patented Oct 6, 1936.
Relates to a mechanism for automatically so modifying the action of the presser foot of a high-speed automatic eyeleting machine that the presser foot will be retracted when the machine stops. Reg. No. 9,232.

PAT. 2,064,027. Fastening inserting machine. Patented Dec 15, 1936.
A paper peg inserting machine having a driver operating mechanism including a toggle adapted to move into broken position when the driver meets excessive resistance. Reg. No. 9,233.

PAT. 2,066,464. Shoe upper lacing machine. Patented Jan 5, 1937.
A lacing machine so organized that the cross lacings are formed on the inside of the shoe upper and thus do not injure the surface of external uncured rubber facings thereon from which the longitudinal stretches of the lacings are spaced by the flanges of the eyelets through which the lacing thread passes. Reg. No. 9,234.

PAT. 2,067,895. Apparatus for attaching heels to shoes. Patented Jan 12, 1937.
A pressure abutment is locked automatically after a predetermined force has been applied to the work through a treadle. A yieldable tube surrounds the nail driver to initially retain the nail in place. Reg. No. 9,235.

PAT. 2,075,938. Machine for operating upon heel-lifts and rands. Patented Apr 6, 1937.
A heel-lift and rand assembling machine in which the lift and rand are advanced in a curved path by a pair of rolls acting in cooperation with a retarding device to hold the assembly against an edge gage during the advancing movement. Reg. No. 9,236.

PAT. 2,077,524. Apparatus for making shoes. Patented Apr 20, 1937.
A machine for pressing sock linings into shoes. A pivoted frame arranged above a shoe support carries a plurality of crepe rubber covered forms any one of which may be positioned within a shoe upon the support and be forced by a manually operated plunger against the sock lining to locate the lining in the shoe and smooth it out. Reg. No. 9,237.

PAT. 2,078,318. Work supporting mechanism. Patented Apr 27, 1937.
A work supporting and positioning device for a sole tacking machine. A continuously rotating rubber roll having a shallow groove to receive the heel end of a lasted shoe presents the shoe to the nozzle of the tacker and holds it there in a predetermined position during the tacking operation. Reg. No. 9,238.

PAT. 2,078,320. Cutting machine. Patented Apr 27, 1937.
A sole rounding and channeling machine having mechanism which grips a sole and advances it positively for successive cutting operations. The positive advance of the sole is effected by one of the knives, acting as a feeding means. Reg. No. 9,239.

PAT. 2,084,553. Method of and apparatus for treating shoe parts. Patented Jun 22, 1937.
In tempering certain areas of a sole without permitting water to contact other areas a localized bend of short radius is formed in the ball portion of the sole, thereby depressing the shank portion only into the water. Reg. No. 9,240.

PAT. 2,085,149. Trimming machine. Patented Jun 29, 1937.
A machine for trimming surplus material from overlasted uppers of McKay or Littleway shoes. A vibratory finger bends the free margin of the upper material away from the insole into the path of a reciprocating trimming knife. Reg. No. 9,241.

PAT. 2,090,677. Grading machine. Patented Aug 24, 1937.
Relates to a machine for evening and marking shoe soles. Provision is made for controlling the operation of the machine so that all soles will be merely marked, or so that soles above a certain thickness or below a certain thickness will be merely marked while others will be both evened and marked. Reg. No. 9,242.

PAT. 2,092,816. Embossing machine. Patented Sep 14, 1937.
A press with automatic timing mechanism to cause a dwell for a predetermined period during which embossing dies are in contact with the work. Intended for embossing and dieing out ankle patches for tennis shoes. Reg. No. 9,243.

PAT. 2,094,007. Flexing machine. Patented Sep 28, 1937.
A machine for reducing the stiffness of a leather sole by bending it to loosen its fibers. Pairs of gripping jaws carried by a turret seize the heel ends of soles and carry the soles between pairs of flexing members which bend them alternately in opposite directions. Reg. No. 9,244.

PAT. 2,097,568. Perforating machine. Patented Nov 2, 1937.
Relates to a perforating machine having mechanism by which the machine may be readily converted from a flat topped table machine into a post or arm machine and also having mechanism for spot punching, as well as a suction device for removing pieces of material cut out by the punches. Reg. No. 9,245.

PAT. 2,100,441. Drier. Patented Nov 30, 1937.
Relates to apparatus for drying freshly cemented soles and stacking the dried soles. At each movement of an intermittently operated conveyor having an upward run and a downward run a freshly cemented sole is fed to the conveyor at the bottom of the upward run and a dry sole, deposited on a support at the bottom of the downward run, is fed out of the path of the conveyor and added to the bottom of a stack of dry soles. Reg. No. 9,246.

PAT. 2,102,731. Lip laying device. Patented Dec 21, 1937.
Relates to a rotary tool for laying sole channel lips. Strips of rubber are inserted in inclined slots in the smooth annular rim of an open ended hollow drum mounted on a driven shaft. Reg. No. 9,247.

Official Gazette, March 9, 1948

(Shoe Machinery (Group 35-59) - Continued)

PAT. 2,103,667. Machine for removing lacings from shoe uppers. Patented Dec 28, 1937.
A series of hooks are arranged to be engaged by the lacings of a shoe pressed against them. A treadle or lever pulls all the hooks into spaces between shearing and holding plates, and a suction tube is arranged to remove the lacings when the hooks are returned to normal position. Reg. No. 9,248.

PAT. 2,104,113. Shoe sole fitting machine. Patented Jan 4, 1938.
Relates to a machine for reducing and roughing the margin of a shoe sole. The sole is mechanically fed past the concave side and in the path of movement of the cutting teeth of a concavo-convex circular saw like cutting and roughing tool by a feed disk having a sharp, spiral work engaging and feeding lip upon its face. Reg. No. 9,249.

PAT. 2,104,118. Apparatus for attaching shoe soles. Patented Jan 4, 1938.
A welt holddown for cement sole attaching machines. A three-piece holddown, readily adjustable to fit the toe portions of shoes of different widths and shapes while maintaining a substantially continuous shoe engaging surface has a transverse toe piece and transversely adjustable side members the front ends of which abut the shoe engaging face of the toe piece. Reg. No. 9,250.

PAT. 2,104,138. Trimming machine. Patented Jan 4, 1938.
Relates to a power operated cutting device operable to cut V notches in the upstanding lasting margin of the toe portion of a shoe positioned in a bed lasting machine. The device is suspended by a jointed shaft so that it may be applied to the shoe by hand. Reg. No. 9,251.

PAT. 2,104,183. Machine for operating upon shoe heels. Patented Jan 4, 1938.
An automatic machine for burnishing heels. A plurality of heels are held and rotated individually by holders arranged on a rotating turret in a circle surrounding a single, central, rotating tool which performs a burnishing operation upon a plurality of the heels simultaneously. Reg. No. 9,252.

PAT. 2,106,171. Flexing machine. Patented Jan 25, 1938.
A machine having automatic mechanism for feeding shoe soles, one by one, from the bottom of a stack to gripping jaws carried by an endless conveyor. The jaws operate automatically to draw the soles between two flexing mechanisms each comprising two sets of flexing rolls. Reg. No. 9,253.

PAT. 2,111,608. Stapling machine. Patented Mar 22, 1938.
A staple forming and driving mechanism having means for cutting wire at opposite equal angles to bring the points of the legs of the staple on the same side of the staple. Reg. No. 9,254.

PAT. 2,173,176. Trimming machine. Patented Sep 19, 1939.
A machine for preparing the toe of a pulled-over shoe for toe lasting with cement. A rotary cutter cuts off the margins of the lining, the box toe and the doubler while two cement applying nozzles spread bands of lasting cement on the margins of the upper and the insole, respectively. Reg. No. 9,255.

PAT. 2,175,200. Trimming machine. Patented Oct 10, 1939.
A machine for trimming off the lasting allowance of the lining, toe-box and doubler at the toe end of a pulled-over shoe. A fixed blade guides the margin of the insole and a cooperating vibrating cutting blade operating between the margin of the shoe upper and the materials to be severed shears off the said materials, a resilient finger moving with the cutting blade serving to smooth out irregularities in the materials to be cut. Reg. No. 9,256.

PAT. 2,288,721. Fastening-inserting machine. Patented Jul 7, 1942.
An inside nailing heel attaching machine in which the nail drivers are carried in groups by independently slidable plates in a jack movable to and from a position in which the plates register with corresponding plates which are advanced in succession by a set of power driven cranks, to cause the nails to be driven in successive groups. Reg. No. 9,257.

PAT. 2,289,415. Machine for assembling shoe parts. Patented Jul 14, 1942.
A method and machine for forming the toe end of the upper of a moccasin type shoe inward over a form by means of a wiper, and a pressure-applying member which presses the sole member of the shoe down against the in-wiped upper. Reg. No. 9,258.

PAT. 2,290,312. Insole margin cementing machine. Patented Jul 21, 1942.
A machine for applying cement to the edge and both faces of the margin of an insole. The cement is applied by three rolls the axes of all of which lie in the same plane. Reg. No. 9,259.

PAT. 2,290,356. Machine for treating soles with heat. Patented Jul 21, 1942.
A plurality of heating units which are individually adjustable in parallel directions form a heating surface which may be arranged to correspond in shape to the contour of the sole to be treated. A conveyor carries the sole past the heating device in a direction widthwise of the sole. Reg. No. 9,260.

PAT. 2,290,648. Shoe machine. Patented Jul 21, 1942.
Relates to manually controlled means for causing a toe lasting machine to perform automatically two cycles of operations instead of one, to subject a heavy upper to a greater number of wipes before the tacks are driven. Reg. No. 9,261.

PAT. 2,290,941. Shoe machine. Patented Jul 28, 1942.
A machine for use in cement lasting stitchdown shoes. A continuously operated drive member is so connected by a system of links to one of a pair of gripper jaws that adjustment of the relative positions of the links by operation of a treadle effects a continuous variation from zero to a maximum value in the motion imparted to the jaw. Reg. No. 9,262.

PAT. 2,291,688. Roughing machine. Patented Aug 4, 1942.
A duplex roughing machine having a pair of driven roughing belts continuously vibrated transversely of their running direction. Each belt is supported by a backing roll at working position against deflection by the work pressed against it. Reg. No. 9,263.

PAT. 2,291,757. Skiving machine. Patented Aug 4, 1942.
Relates to a skiving machine of the tubular knife type in which the feed roll is mounted in a pivoted frame which can be swung from closed to open position to afford access to the knife. Provision is made for preventing application of power to rotate the knife when the pivoted frame is in open position. Reg. No. 9,264.

PAT. 2,292,508. Trimming machine. Patented Aug 11, 1942.
Relates to an insean trimmer having a rotary cutter head carrying a pair of cutters in shearing relation to a feed wheel and rotatable about their own axes at a speed slower than that of the cutter head to present a new cutting surface to the work in each rotation of the head, thereby prolonging the life of the cutters. Reg. No. 9,265.

PAT. 2,292,936. Pounding machine. Patented Aug 11, 1942.
A shoe bottom pounding machine having a pounding roll in which are outwardly curved rods carrying loose rings so arranged that during the beating operation they present curved work-engaging surfaces which can be brought to bear with uniform pressure upon the curved portions of the work. Reg. No. 9,266.

PAT. 2,293,080. Shoe machine. Patented Aug 18, 1942.
A trimming machine having a shoe upper engaging template with a thin, flexible portion to fit various curvatures and a thick, rigid portion to bridge the shank of the shoe and guide an operation around the margin of the shoe, partly by contact with the template and partly by the upper, the thin portion being arranged to transfer the guiding action from the template to the upper, and vice versa. Reg. No. 9,267.

PAT. 2,293,243. Machine for assembling insoles and back parts of shoes. Patented Aug 18, 1942.
Relates to a device comprising an insole supporting plate and gages for positioning an insole on the plate and a shoe back part with the forward ends of its flange on the insole and the rear portion of the flange spaced from the insole while the forward ends are tacked or stapled to the insole. Reg. No. 9,268.

PAT. 2,293,244. Machine for fastening uppers to insoles. Patented Aug 18, 1942.
A modified heel seat lasting machine in which the wipers are held stationary in closed position and serve as means for pressing the flange of a molded heel part of a shoe upper down on an insole on a metal form or last while tacks are driven to secure the upper and insole together. Reg. No. 9, 269.

PAT. 2,293,252. Finishing edges of sheet material. Patented Aug 18, 1942.
Relates to a machine in which a finishing bead of plastic material is applied to the raw edge of a sheet of leather by feeding the edge portion of the sheet through an opening in the side of an extrusion nozzle. The opening is formed at its ingoing side to fit the work and is larger at its outgoing side, to form a bead of extruded material on the edge of the work. Reg. No. 9,270.

PAT. 2,293,738. Shoe lasting and sewing machine. Patented Aug 25, 1942.
A stitchdown thread lasting machine is provided with a welt guide to permit sewing a grooved welt to a shoe upper and a portion of the insole while the upper is being lasted. The welt guide is moved away from the upper during the feed of the work and toward the upper during the stitch forming operation. Reg. No. 9,271.

PAT. 2,293,794. Adhesive applying roll. Patented Aug 25, 1942.
Relates to a method of and means for mounting a cover on an adhesive applying roll. The cover is first slipped over the roll and permanently secured at one end. Then it is tensioned and held under tension by springs hooked into the other end while the second end is permanently secured to the roll. Reg. No. 9,272.

PAT. 2,293,834. Fastening-inserting machine. Patented Aug 25, 1942.
Relates to a heel attaching machine in which a shoe support is moved by power, from a position in cooperative relation with mechanism which drills a hole through the heel seat of the shoe into the heel, to a position in which a screw driving mechanism drives a heel attaching screw into the drilled hole and then back to the starting position. Reg. No. 9,273.

PAT. 2,293,863. Machine for and method of operating upon the heel portions of shoes. Patented Aug 25, 1942.
A heel attaching machine having a shoe and heel support and a feeler cooperating with the support to control the extent of movement of a reciprocatory fastening driver by which a heel attaching fastening is driven. Reg. No. 9,274.

PAT. 2,294,443. Machine for operating upon soles. Patented Sep 1, 1942.
Relates to an insole lip-setting machine having a lower fixed plow against which a sole is pressed by a supporting roll and an upper spring-pressed plow which engages the sole at the other side of the lips and follows the sole surface regardless of variations in sole thickness. Reg. No. 9,275.

PAT. 2,294,472. Sole margin cementer. Patented Sep 1, 1942.
A machine having a pair of cement nozzles pivotally mounted on swinging arms capable of tilting heightwise of the work. Sole edge guides on the nozzles follow the contour of opposite edges of a sole fed in a straight line between the nozzles, and the margins along both sides of the sole are coated simultaneously with cement. Reg. No. 9,276.

PAT. 2,294,481. Method and apparatus for use in shoemaking employing heat. Patented Sep 1, 1942.
Relates to a shoe rack for metallic lasts. Sockets in the cones of the lasts are placed on jack pins containing electric resistance heating units by means of which the lasts are kept hot while shoes upon them are being transferred from one operation to another. Reg. No. 9,277.

PAT. 2,295,622. Abrading machine. Patented Sep 15, 1942.
A buffing machine the feature of which is a replaceable work engaging member of wire in a resiliently yieldable finger which presses the work against a buffing tool. The wire protects the finger from damage by contact with the buffing tool and may easily be replaced if damaged by such contact. Reg. No. 9,278.

PAT. 2,295,662. Fastener forming and inserting machine. Patented Sep 15, 1942.
A machine for shearing from wire a double clench fastener

having at each end an inclined face which determines the direction of the clench, driving and clenching it. The severed fastener is driven from a passageway in a throat in which all fasteners are similarly oriented so they will all clench in the same direction. Reg. No. 9,279.

PAT. 2,295,677. Machine for operating on shoe upper. Patented Sep 15, 1942.
A flange forming and trimming machine in which a flange at the back part of a shoe upper is wiped in and trimmed to a predetermined contour, and the upper is molded substantially to final shape. Reg. No. 9,280.

PAT. 2,295,682. Machine for preparing welting. Patented Sep 15, 1942.
Relates to a cement extruding machine provided with a special nozzle and guide to adapt it for coating a beveled margin of a strip of welting. The machine drive is interconnected with a drive for a reel specially constructed to receive and hold the coated strip while the cement dries. Reg. No. 9,281.

PAT. 2,295,690. Machine for treating counters. Patented Sep 15, 1942.
A machine including a pair of dies arranged to form longitudinal corrugations in the forward ends of the inturned flange of a molded counter to make the ends of the flange sufficiently pliable to be easily lasted. Reg. No. 9,282.

PAT. 2,295,695. Abrading machine. Patented Sep 15, 1942.
A buffing machine in which the work is pressed against a buffing roll by a series of pneumatically actuated fingers arranged in rows, the fingers in one row being staggered with relation to those of the other row. An intermittently operated air jet blows the dust from the buffing roll. Reg. No. 9,283.

PAT. 2,295,700. Device for use in applying pressure to shoe bottoms. Patented Sep 15, 1942.
A device for use in a cement sole attaching machine when using pressure responsive cement. A very thin, polished plate is secured to a toe gage by which a cemented shoe is positioned relatively to a cemented sole, to prevent the shoe from touching the sole before the shoe is properly positioned. The gage and plate are withdrawn before attaching pressure is applied. Reg. No. 9,284.

PAT. 2,296,283. Machine for shaping uppers over lasts. Patented Sep 22, 1942.
A fluid pressure operated gripper mechanism in a pulling-over machine for subjecting a shoe upper to a series of rapidly repeated pulling impulses in the pause in the cycle which occurs after the initial pull on the upper. Reg. No. 9,285.

PAT. 2,298,337. Press. Patented Oct 13, 1942.
Relates to a clicking press having a vertically adjustable cutting block and hydraulic mechanism for elevating the block to, and holding it in, operative position. This serves to permit release of the presser arm if stalled on the block, or adjustment of a stop against which the block is positioned when the block is raised by the hydraulic mechanism. Reg. No. 9,286.

PAT. 2,298,384. Machine for use in making welt shoes. Patented Oct 13, 1942.
A machine for preparing a welt upper for assembly with an insole, filler and outsole assembly, comprising driven mating rolls for premolding the toe end of the upper and bending the welt into sole attaching position. Reg. No. 9,287.

PAT. 2,298,389. Assembling machine. Patented Oct 13, 1942.
A machine for assembling on a last heel portions of stitch-down upper parts, comprising a last depressor and wipers which may be retracted to enable the operator to pull up the quarter linings with hand pincers. Reg. No. 9,288.

PAT. 2,298,390. Lasting machine. Patented Oct 13, 1942.
A machine for lasting welt shoes comprising lasting rolls operating in the welt crease, rolls for pressing the welted margin to cement it to an insole, and means for feeding the shoe through the rolls. Reg. No. 9,289.

PAT. 2,298,430. Trimming machine. Patented Oct 13, 1942.
Relates to a machine for trimming crepe soles, the chief feature of novelty being in a feed roll designed to prevent distortion of the sole during the trimming operation, which is performed by a reciprocatory knife. Reg. No. 9,290.

PAT. 2,299,159. Finishing tool. Patented Oct 20, 1942.
Relates to an edge setting tool comprising two interlocking sections which are automatically adjusted toward or from each other during the edge setting operation so as to keep the width of the tool correlated with the thickness of the sole at the point of operation. Reg. No. 9,291.

PAT. 2,299,176. Roughing machine. Patented Oct 20, 1942.
A shoe upper roughing machine employing two closely adjacent rotary wire brushes relatively adjustable heightwise by treadle action to operate upon a narrow or wide band, as the case may be, on the shank and forepart portions, respectively, of a shoe bottom. Reg. No. 9,292.

PAT. 2,299,788. Lip turning machine. Patented Oct 27, 1942.
An insole lip turning machine having separate lip raising, lip turning, and lip setting means, operating in sequence, with means for backing up the lip while it is being operated upon by pounding means, to prevent bulging or distortion of the lip material and insure straightness of the shoulder formed. Reg. No. 9,293.

PAT. 2,299,818. Machine for cutting sheet material. Patented Oct 27, 1942.
Relates to a die assembly adapted for use in cutting pieced heel lifts in a clicking machine. A plurality of heel lift dies of different sizes are arranged below a yieldable table upon which the material to be cut is positioned and are so secured that they can be readily adjusted or removed. Reg. No. 9,294.

PAT. 2,300,462. Folding machine. Patented Nov 3, 1942.
Relates to a folding machine in which a rotatable hammer consisting of a roll having spiral grooves in its work engaging surface is rotated about an axis substantially normal to the direction of feed of the work. This roll assists in the feeding operation and exerts an inward force on the upturned margin of the work as the margin is folded back upon the body of the work. Reg. No. 9,295.

PAT. 2,300,552. Nailing mechanism. Patented Nov 3, 1942.
Relates to a machine for driving in inclined directions heel attaching nails having cross-shaped heads. Inclined passages formed by intersecting slots guide the nails which are driven by flat driver bars each of which moves in one of the slots. Reg. No. 9,296.

PAT. 2,301,275. Pinking machine. Patented Nov 10, 1942.
A machine for pinking wing tips having a reentrant point at the center of the throat. The work may be fed in either direction and when a wing tip is being pinked the operation is performed in both directions from the center point. Reg. No. 9,297.

PAT. 2,301,300. Machine for roughing shoe parts. Patented Nov 10, 1942.
A sole roughing machine having a multipointed scratching tool which is reciprocated across the sole margin and feed mechanism which advances the work at such a rate, relative to the movement of the tool, that a network of scratches is produced. The tool is tiltable to accommodate itself to various angles of bevel of the sole margin. Reg. No. 9,298.

PAT. 2,301,982. Press. Patented Nov 17, 1942.
Relates to a clicking machine in which cooperating frusto-conical members on the spindle and frame, respectively, of the machine engage each other upon descent of the spindle in order to brake angular movement of the spindle and beam. Reg. No. 9,299.

PAT. 2,302,019. Machine for operating upon shoes. Patented Nov 17, 1942.
Relates to a machine for cement attaching a sole to a prewelt shoe upper off the last. A pair of driven rolls progressively press the cemented welt and sole together, the welt being guided by a horn supported roll engaging its inner edge and an edge gage acting against its outer edge. The sole is guided by a separate edge gage. Reg. No. 9,300.

PAT. 2,302,738. Machine for operating upon soles. Patented Nov 24, 1942.
A channel lip cutting and scoring machine having a work table with which are associated various dies for marking size, width and other symbols and indenting lines in the grain face of a sole. Novel gage mechanism positions the sole in proper relation to the operating tools. Reg. No. 9,301.

PAT. 2,302,750. Machine for use in shaping shoe uppers. Patented Nov 24, 1942.
A machine for preshaping the forepart of a prewelt upper before the welt is applied. The upper is held in an outer mold while an inner form containing a rubber expander is caused to bulge outward and shape the peripheral portion of the upper against the outer mold. Reg. No. 9,302.

PAT. 2,302,768. Machine for operating upon soles. Patented Nov 24, 1942.
Relates to a sole conforming machine having relatively movable clamps for the fore and heel parts of a sole and means for moving the clamps to cause a relative movement laterally of the sole between its mid portion and its ends to create a fullness or surplus of sole material in the inner margin of the shank portion of the sole. Reg. No. 9,303.

PAT. 2,303,439. Machine for roughing shoe parts. Patented Dec 1, 1942.
A machine having a reciprocating chopping tool the edge of which is scalloped and an intermittent feed mechanism which advances a sole between successive penetrations of the sole by the tool. The tool forms in the surface of the sole a multitude of closely adjacent gashes disposed at an oblique angle to the surface of the sole. Reg. No. 9,304.

PAT. 2,304,959. Gauging means for shoe machines. Patented Dec 15, 1942.
An an aid in positioning right and left shoes in a heel attaching machine, translucent panels below the forepart of the shoe show lines of light projected upon them through slots in adjustable plates covering a chamber in which are electric lights. One line of light locates a right shoe and another line locates a left shoe. Reg. No. 9,305.

PAT. 2,305,682. Gripper. Patented Dec 22, 1942.
Relates to a gripper operating mechanism for lasting machines so constructed that the gripper jaws are first closed to grip a shoe upper and are thereafter closed more tightly to increase the force of their grip on the upper during the upper-pulling operation. Reg. No. 9,306.

PAT. 2,305,689. Machine for use in operating upon shoe uppers. Patented Dec 22, 1942.
A two-station machine for molding the back parts of shoe uppers. At one station an intramarginal portion of a back part is stretched, the back part is premolded and the lasting margin is crimped. At the other station the back part is molded under heavy pressure and the lasting margin is turned in to form an attaching flange. The two stations are operated alternately. Reg. No. 9,307.

PAT. 2,306,441. Splitting machine. Patented Dec 29, 1942.
A sole splitting or evening machine designed to produce a finished product which is of uniform thickness throughout. A rotating turn-table on which the soles are placed cooperates with a conical feed roll rotated at the same surface speed to feed the soles to a splitting knife. The feed roll is slotted to accommodate the operative portions of presser fingers which extend into close proximity to the knife. Reg. No. 9,308.

Sewing Machines, Parts and Attachments (Group 35-83)

PAT. 1,950,564. Sewing machine. Patented Mar 13, 1934.
A crank operated lockstitch sewing machine having advantageous needle, awl, needle guide and shuttle actuating mechanisms. Reg. No. 9,309.

PAT. 1,951,369. Welt sewing machine. Patented Mar 20, 1934.
A welt shoe sewing machine having a welt cutter and a welt gripper in which connections are provided for locking the cutter from operation until the gripper is shifted while gripping the welt by a pull on the welt, whereupon the cutter may be actuated by a manual control. Reg. No. 9,310.

PAT. 2,046,062. Welt tempering machine. Patented Jun 30, 1936.
Welting is drawn around, and rotates, a guide wheel which is geared to and drives a revolving brush the lower part of which is immersed to water and the upper part of which rubs the water into the welt. Reg. No. 9,311.

PAT. 2,085,253. Sewing machine. Patented Jun 29, 1937.
A machine for sewing adhesive tape, having a tape guide in which the tape is freed from adhesion to the confining surfaces of the guide during work feed by a member acting at right angles to the length of the tape. Reg. No. 9,312.

PAT. 2,296,888. Shoe sewing machine. Patented Sep 29, 1942.
A device for preventing injury to the inseam in a Goodyear welt shoe which comprises a thin horizontal plate pivoted to the work table of an outsole stitcher to provide a crease guide. The plate is connected to the edge gage mechanism and is arranged to be brought into operative position when the edge gage is moved toward an inoperative position, thus moving the inseam out of the path of the needle and awl. Reg. No. 9,313.

PAT. 2,298,268. Sewing machine. Patente Oct 13, 1942.
An outsole stitcher in which each stitch is tightened by a take-up between which and the work a thread clamp acts to stop withdrawal of thread from the work and to limit the stitch setting tension and thereafter causes the take-up to pull thread for the next stitch from the supply The thread clamp finally is moved bodily a short distance to set the stitch and a fixed thread clamp between the take-up and the supply locks the thread after the supply for the next stitch has been pulled off. Reg. No. 9,314.

PAT. 2,303,461. Shoe sewing machine. Patented Dec 1, 1942.
A sewing machine attachment for guiding a seam in a circular path surrounding a spike in the sole of an athletic shoe. A perforated lug in the attachment surrounds the spike and is arranged to clamp the shoe adjacent to the sewing point while permitting movement of the attachment to clamp and unclamp the shoe. Reg. No. 9,315.

Other Machinery

PAT. 1,911,663. Treadle mechanism. Patented May 30, 1933.
Control mechanism including two treadles, one located in the usual position for use when the operator is standing and the other at a higher level for use when the operator is seated. Group 35—59. Reg. No. 9,316.

PAT. 1,920,260. Mechanism for supplying fastenings. Patented Aug 1, 1933.
A mechanism for distributing tacks, having a plurality of raceways and a plurality of separately yieldable members, movable by the operator to apply pressure to tacks in the raceways and thus prevent their delivery. Group 35—59. Reg. No. 9,317.

PAT. 1,927,060. Roller clutch. Patented Sep 19, 1933.
Steel inserts which serve as the wedge members of a Horton clutch are made adjustable to take up wear and provide new wearing surfaces after grooves have been formed in them at prior settings. Group 35—66. Reg. No. 9,318.

PAT. 1,930,579. Apparatus for treating heels. Patented Oct 17, 1933.
An apparatus for conditioning and holding adhesive-coated heels preparatory to the application of cover material. The heels are placed in radial holders of a rotary conveyor which carries them through a concentric, segmental, heating chamber and presents them to a jack in which each heel is held while a cover is applied to it. Group 35—59. Reg. No. 9,319.

PAT. 1,931,611. Fastener separating mechanism. Patented Oct 24, 1933.
A tack separating mechanism comprising a roll having a rubber periphery for engaging tacks and means for rotating the roll, intermittently, to separate the tacks. Group 35—59. Reg. No. 9,320.

PAT. 1,933,672. Pattern reproducing machine. Patented Nov 7, 1933.
An improvement on the machine of Pat. 1,953,236 to adapt it for "center grading" irrespective of the actual settings of the grading mechanism. Means is provided for locking the follower and the cutting tool against relative movement and absorbing the movement effected by the grading mechanism when the locking means is effective. Group 35—59. Reg. No. 9,321.

PAT. 1,953,236. Pattern grading machine. Patented Apr 3, 1934.
The machine comprises four primary instrumentalities, namely, model and work holders, a follower, and a cutting tool, interconnected by pantographic mechanism which is adjustable to change the length and width grading factors independently during operation. Means is provided for compensating for relative movement between two of the primary instrumentalities produced by adjustment of the pantographic mechanism, to avoid a jog in the work. Group 35—59. Reg. No. 9,322

PAT. 1,980,360. Apparatus for drying or conditioning articles. Patented Nov 13, 1934.
An apparatus for drying the gum on envelope flaps. The envelopes are carried around by a conveyor between two U-shaped air ducts from which warm, moist air is delivered upon the gummed flaps to dry the gum as the envelopes travel. Group 35—64. Reg. No. 9,323.

PAT. 2,001,750. Shoe-conveying system. Patented May 21, 1935.
One conveyor is arranged above another and positioning devices at the transfer point maintain shoes upright as they descend from the upper conveyor to the lower. These devices are yieldable and actuate a mercury switch to stop the driving motor when clogging occurs. Group 35—62. Reg. No. 9,324.

PAT. 2,003,391. Tack supplying device. Patented Jun 4, 1935.
A device for supplying a single tack, including a pair of rolls, one of which receives the tack and presents it in position to be taken by an operator. Group 35—59. Reg. No. 9,325.

PAT. 2,012,350. Starting and stopping mechanism. Patented Aug 27, 1935.
A starting and stopping mechanism including a member movable, by the operator, to start the operation of a power-driven member and arranged, upon further movement in the same direction, to stop the operation of the power-driven member. Group 35—66. Reg. No. 9,326.

PAT. 2,068,725. Sorting machine. Patented Jan 26, 1937.
A machine for sorting such articles as heel lifts for thickness. A turntable carries a series of cam controlled calipering clamps which release the articles suddenly at locations determined by their thickness. Group 35—59. Reg. No. 9,327.

PAT. 2,070,633. Cam operated machine. Patented Feb 16, 1937.
A machine actuated by a slotted cam having a follower engaging the slot in the cam, in which the cam slot is so formed that the follower moves from one side of the slot to the other with a uniform low velocity and engages the other side of the slot without undesirable impact at the maximum speed of operation for which the machine is intended. Group 35—59. Reg. No. 9,328.

PAT. 2,185,939. Method of and apparatus for upsetting hollow rivets. Patented Jan 2, 1940.
Tubular rivets having closed inner ends are set in plates which are accessible on only one side by a gyrating mandrel which is inserted in a rivet and expands both ends of the rivet with a spinning action. Group 35—59. Reg. No. 9,329.

PAT. 2,301,351. Apparatus for disposing of dust. Patented Nov 10, 1942.
A dust collecting apparatus for abrading machines. A settling chamber has a row of intake openings separated by a baffle from an exhaust conduit the intake orifice of which is bordered by a flange which prevents dust deposited on the conduit from being swept into the conduit. Group 35—64. Reg. No. 9,330.

Shoes, Shoe Parts and Shoemaking Methods (Group 31-41)

PAT. 2,300,540. Method for use in attaching soles to shoes. Patented Nov 3, 1942.
This method consists in relatively locating a shoe and sole while they are spaced from each other and bulging the shank portion of the sole upward, before applying sole-attaching pressure, to make the length of the shank portion of the sole correspond to that of the shank portion of the shoe so that no stretching of the sole material is necessary in order to lay it properly against the shank portion of the shoe. Reg. No. 9,331.

PAT. 2,407,224. Shoe and method of making the same. Patented Sep 10, 1946.
A platform shoe is made by securing a wrapper strip to an upper, securing an out-turned margin of the upper to the reduced margin of a rabbeted platform sole, turning the wrapper strip outward, downward and inward around the edge of the platform, and attaching an outsole to the shoe. Reg. No. 9,332.

PAT. 2,407,352. Method of making shoes. Patented Sep 10, 1946.
A slip-lasted platform shoe is made by securing together off the last an upper, an edge covering strip and an insole, with the upper wrong side out, turning the upper, inserting a last, attaching a platform sole to the insole, wrapping the covering strip around the edge of the platform, and attaching an outsole to the inturned margin of the covering strip. Reg. No. 9,333.

PAT. 2,409,813. Reversible shoe. Patented Oct 22, 1946.
Relates to a reversible platform shoe having two platform soles in superimposed relation, a stay piece secured between them, a double faced upper secured to the margin of the stay piece, and wrapper strips covering the margins of the platform soles and having their margins also secured to the margin of the stay piece. Reg. No. 9,334.

Devices

PAT. 1,871,880. Finishing tool. Patented Aug 16, 1932.
A heel burnishing tool having an indenting wheel and a rand crease engaging lip. Group 32--91. Reg. No. 9,335.

PAT. 1,894,452. Last. Patented Jan 17, 1933.
A separable last having a forepart and a heel part separated by a cut and joined to each other by a resiliently supported hook on one part engaging a pin in the other part. Group 35--59. Reg. No. 9,336.

PAT. 1,895,457. Fastening inserting mechanism. Patented Jan 31, 1933.
A hand stapling device adapted to drive a staple with its legs deflected laterally of the crossbar and having a novel staple strip magazine. Group 35--59. Reg. No. 9,337.

PAT. 1,969,747. Insertion of fastenings. Patented Aug 14, 1934.
A welt type staple having helically clenched legs; article, shoe and method. Group 35--59. Reg. No. 9,338.

PAT. 1,976,016. Heel finishing tool. Patented Oct 9, 1934.
A finishing tool having means for applying and distributing a finishing medium to, and for burnishing, the peripheral surface of a heel. Group 32--91. Reg. No. 9,339.

PAT. 2,040,758. Spray collector. Patented May 12, 1936.
Two tubular members placed end to end form a passage through which unused sprayed material is drawn by a fan. Cheesecloth to filter out the material is stretched across the passage and is gripped between the ends of these members. Group 35--64. Reg. No. 9,340.

PAT. 2,042,512. Last. Patented Jun 2, 1936.
A last for use in attaching a heel to a shoe by the two-step method of Patent 2,030,139. The screw engaging plate in the last is shiftable between screw-engaging and screw-releasing positions under the influence of gravity instead of by a manually operated actuating member. Group 35--59. Reg. No. 9,341.

PAT. 2,058,499. Welt supporting device. Patented Oct 27, 1936.
A portable device to be applied to a welt shoe to support the welt against sole attaching pressure. Pivoted plates formed to fit in the welt crease of the shoe carry sole positioning gages, one of which is yielding. Group 35--59. Reg. No. 9,342.

PAT. 2,068,025. Fastening. Patented Jan 19, 1937.
Relates to a fiber fastening comprising a plurality of strands of paper twine, impregnated with glue, twisted together and secured in twisted relation by an additional coating of glue. Group 22--98. Reg. No. 9,343.

PAT. 2,071,400. Last. Patented Feb 23, 1937.
An extensible last the heel part of which can be moved rearward by mechanism forming part of a special jack while the last is in a shoe. Means is provided for preserving the continuity of the side faces of the last when the heel part is moved away from the forepart. Group 35--59. Reg. No. 9,344.

PAT. 2,075,916. Last. Patented Apr 6, 1937.
Relates to a collapsible last having a metal heel part and a wooden forepart to which a metal guard plate forming the joint with the heel part is fastened by the same bonding mechanism that holds the heel part and forepart together. Group 35--59. Reg. No. 9,345.

PAT. 2,085,148. Hinge last. Patented Jun 29, 1937.
A hinge last the parts of which are separable and which is so organized that the heel part can be removed from a shoe on the last without disturbing the forepart. Group 35--59. Reg. No. 9,346.

PAT. 2,087,969. Method and tool for roll-clenching eyelets. Patented Jul 27, 1937.
Relates to a method and tool for upsetting ductile metal eyelets by roll-clenching the end of an eyelet against a

work-piece and deforming its rim at one or more points to develop work-indenting projections on its work-engaging edge. Group 32--91. Reg. No. 9,347.

PAT. 2,093,436. Last. Patented Sep 21, 1937.
A last for use in the machine of Patent No. 2,093,435. Air ducts extend from the thimble hole to various portions of the surface of the last, a valve admitting air to each duct in turn while closing the other ducts. Group 35--59. Reg. No. 9,348.

PAT. 2,094,118. Last. Patented Sep 28, 1937.
A hinge last the parts of which are connected by an open, resilient, eliptical link having two oppositely facing lugs on its longer, inside, faces which lugs act as abutments to prevent undue stretch of the link and backward bending of the last under pressure. Group 35--59. Reg. No. 9,349.

PAT. 2,107,375. Eyelet. Patented Feb 8, 1938.
Relates to a ductile metal eyelet the barrel of which has a blunt clenching end divided into alternate high and low segments by a series of arcuate indentations. When such an eyelet is roll-clenched the high segments are embedded in the eyelet receiving material more deeply than the low segments, increasing the holding power of the eyelet, and the form of the indentations prevents the clenching end of the eyelet from bursting or splitting. Group 35--59. Reg. No. 9,350.

PAT. 2,199,483. Last. Patented May 7, 1940.
Relates to a last having a clinching plate spaced from the bottom of its forepart, to separate the main portion of a split insole from the flap so that lasting tacks may be clinched into the surface of said main portion and later be covered by the flap, to make a "tackless" forepart in the shoe. Group 35--59. Reg. No. 9,351.

PAT. 2,296,922. Strip brush. Patented Sep 29, 1942.
A strip brush having a metal channel back is made by fastening groups of bristles to the back by means of integral teeth along the edges thereof which are folded over the bristles before the strip of backing metal is folded into a channel. Group 39--22. Reg. No. 9,352.

PAT. 2,296,949. Brush structure. Patented Sep 29, 1942.
The core of a channel-backed strip brush is made of rubber which holds the bristles yieldably in even spacing. To permit the bristles to breathe without being cut by the edges of the backing strip a resilient layer is interposed between the bristles and the strip. Group 39--22. Reg. No. 9,353.

PAT. 2,302,761. Brush strip. Patented Nov 24, 1942.
A self-sustaining backing strip has its margins inturned to grip against adjacent portions of the strip the inner ends of two rows of bristles. The strip is channel shaped and portions of the bristles extending outward from the channel are gripped between the opposed faces of the inturned margins and are capable of flexing across the rounded edges of the channel provided thereby. Group 39--22. Reg. No. 9,354.

Miscellaneous
(Group 35-59)

PAT. 2,296,942. Method of providing fastening material. Patented Sep 29, 1942.
The method comprises arranging a plurality of glue coated strands of fiber fastening material side by side in contact with each other, softening the glue to form the assembled strands into a flat ribbon, winding the ribbon into a coil, unwinding the ribbon as needed, and separating the strands for simultaneous use at different operating positions. Reg. No. 9,355.

PAT. 2,296,964. Machine for inserting blocks in hollow articles. Patented Sep 29, 1942.
A machine having a hollow, expansible, frusto-conical guiding member through which a fluid operated plunger forces blocks, delivered from a stack into the path of movement of the plunger, into the mouths of hollow articles placed upon the guiding member. Reg. No. 9,356.

Correction

PAT. 2,431,847. Map projection device. Patented Dec 2, 1947.
By means of this device a portion of the surface of a curved map may be projected in exact scale and proportion to that a navigation course, such as a great-circle course, may be determined or followed. The device is a transparent globe (upon which a map is reproduced) mounted for rotation within a box having an upper ground glass surface. A source of light adjacent one side of the globe is directed diametrically through the globe and projected by means of a magnifying lens to the ground glass which serves as a viewing screen for a sharp enlarged image of a selected small portion of the globe. (Owner) Van Dusen Engineering Company, 2706 Lytton St., San Diego 10, Calif. Group 39--13. Reg. No. 9,160.

PUBLICATIONS ISSUED

BY

OFFICE OF TECHNICAL SERVICES

PB L 80401. ADAMS, D. A. W. and BAIRD, W. Some miscellaneous organic intermediates and products; Manufacture (mainly) by I. G. Farbenindustrie. (BIOS Final Rept 1154, Item 22). Sep-Oct 1946. 47 p. Price: Mimeo-$1.50

Data has been provided on the manufacture of a number of miscellaneous organic chemicals which cannot be very suitably characterized under any suitable "user" heading. The information was obtained from various I.G. factories (Ludwigshafen, Leverkusen, Uerdingen, and Höchst) and in one case from the Gesellschaft für Teerverwertung, Duisburg. Following is a listing of the products: acetophenone; benzylphenol; benzylsulfanilic acid; Blankophor B; Catechol; chloroacetic acid; 4-chlorobenzaldehyde-2-sulfonic acid; β-chloroethanesulfonic acid sodium salt; 4-chlorotoluene-2-sulfonic acid; cyanacetamide; cyanogen chloride; cyanuric acid; dibenzyl sulfide; dibenzyl sulfoxide; 2,4-dichlorophenol; diethylamine; diethylenetriamine; dihydroxydiphenyl sulfone; 2,4-dimethyl phenol; diphenylolpropane; isododecylphenol; epichlorohydrin; ethanolamines (mono-,di-, and tri-); ethylenediamine; ethylenimine; ethylene oxide; glycerol mono- di-chlorohydrin; 8-hydroxyquinoline; Lumweiss R; octadecylsuccinic anhydride; pentachlorophenol; phenylisocyanate; β-phenylethyl alcohol; phenylmercury acetate; polyglycerol; Preventol Flussig I Preventol-N, O, and ON; propylene polymers; resin from triisopropylbenzyl chloride; trichlorophenol; triethylenetetramine; triisopropylbenzene; and triisopropylbenzylchloride.

PB L 81611. BALMFORTH, J. W. A. and others. I. G. Farbenindustrie A. G. Manufacture of vat dyestuffs at Hoechst, Mainkur, Leverkusen and Ludwigshafen. (BIOS Final Rept 1493, Item 22) Sep-Nov 1946. 77 p. Price: Mimeo-$2.25

The information on vat dyestuffs is supplementary to that contained in BIOS Final Report 987 entitled "Vat dyestuffs and intermediates," PB 75860, v. 6, p. 189, this Bibliography. The present report includes the Algol, Helindole and Indanthrene range of vat dyestuffs manufactured by the I. G. The location of manufacture is given after each dyestuff, the list being in alphabetical order. The report also contains information on Anthrasol dyestuffs supplementary to BIOS Final Report 960 entitled, "Anthrasols, Heliogens and Sirius Light Blue dyestuffs, PB 65657, v. 3, p. 378, this Bibliography. The Anthrasols are manufactured at Höchst. The present report includes manufacturing processes for Anthrasols Blue I B C (catalytic process), Brilliant Orange I R K, Brilliant Violet I 4 R, Green I 3 G, and its intermediates, Grey I B L, Olive Green I B, Printing Blue I 2 G, Yellow H C G, and Yellow V. Information contained in this report was supplied by I. G. officials, Dr. Marschall, Dr. Ochwat, Dr. Teller, and Dr. Beiliner.

PB L 79308. BOLT, H. R. and others. Inorganic pigments; synthetic iron oxides. (BIOS Final Rept 1272, Item 22). n. d. 75 p. Price: Mimeo-$2.25

The investigation of German synthetic iron oxides production covered the practice in the following plants: I. G. at Uerdingen and Oppau; Kali Chemie A. G.; Franz Rasquin; Schroeder & Stadelman; and Chemische Werke Wesseling (L. Vossen). The production of the synthetic oxides in Germany was on a large scale. The I. G. at Uerdingen had reached, at one time, a production of 3,000 tons per month, largely by the use of the process they had developed by which yellow and black iron oxides were produced during the reduction process of nitrobenzene to aniline. Rasquin of Kolin (200 tons per month yellow and black) and Kali Chemi (100 to 150 tons per month, mostly red) were the next largest producers. Apart from the I. G. aniline process, most of the methods for the yellow were variations of the "seed" process. Nothing new was observed in the production of black oxides. Red oxides were all produced in rotary tube furnaces. Whenever possible, details of design, output, and fuel consumption have been obtained and included in this report. Attention is called to two processes, (1) the production of red oxide from iron pentacarbonyl at Oppau, and (2) the production at Ludwigshafen of iron oxide for Magnetophone reproduction. No details have been given of processing of the products (filtering, drying, grinding, etc.) except where some unusual method has been used. Appendix A compares the different samples. Several flowdiagrams and sketches are included.

PB L 79317. BRUNDRIT, D. and TAYLOR, A. W. C. German acetylene chemical industry. Chlorinated solvents. (BIOS Final Rept 1056, Item 22). Jan 1947. 80 p. Price: Mimeo-$1.75

A detailed investigation has been made of the methods and apparatus used by the German manufacturers of chlorinated solvents and the results of the investigation are given in this report. Only two factories in the British, American and French zones of occupation are engaged in the manufacture, namely, Dr. Alexander Wacker Werke, Burghausen and I. G. Rheinfelden. The technique in both factories is very similar and, with one exception, line diagrams of the plants published in this report are based on the technique at the Wacker Werke which is considered superior to that at I. G. Rheinfelden. The exception is the plant for the manufacture of symetrical transdichloroethylene, the process at Rheinfelden being unique. The report discusses the production of tetrachloroethane, dichloroethylene, penta- and perchloroethylene, hexachloroethane. Hexachlorobutadiene is made at Burghausen by the polymerization of trichloroethylene to hexachlorobutene which is then treated to give the desired compound. The report also describes the thermal cracking of tetrachloroethane, the tetrachloroethane-trichloroethylene conversion, and the production of acetylene at Rheinfelden and the purification of acetylene at Burghausen.

PB L 80576. BRUNDRIT, D. and TAYLOR, A. W. C. German acetylene chemical industry. Vinyl acetate monomer. (BIOS Final Rept 1291, Item 22) Mar 1947. 37 p. Price: Mimeo-$1.25

The manufacture of vinyl acetate monomer has been investigated at Dr. Alexander Wacker Werke, Burghausen and at I. G. Höchst. Monovinyl acetate is prepared by the reaction of acetylene with acetic acid in the vapor phase, in the presence of zinc acetate adsorbed on activated charcoal. The reaction which is exothermic, takes place between 170° C. and 220° C., depending on the age of the catalyst. The gases after reaction are cooled, the vinyl acetate and unchanged acetic acid are condensed and the unconverted acetylene is recycled. The crude vinyl acetate-acetic acid mixture is purified by fractionation in continuous stills. The plant and process at both locations are described. At Höchst, acetylene is generated in conventional wet generators and at Burghausen in tray type dry generators. The production and purification of the acetylene at both plants is described. Flow diagrams illustrate monovinyl acetate production. A comparative cost sheet for vinyl acetate production is also included. For another report on the same processes at Höchst and Burghausen, see BIOS Final Report 1412, "Vinyl acetate vapour phase process," PB L 80403.

PB L 79233. BRUNDRIT, D. German acetylene chemical industry; Vinyl chloride. (BIOS Final Rept 1290, Item 22). Mar 1947. 21 p. Price: Mimeo-$0.75

A description is given of the production of vinyl chloride monomer at Alexander Wacker G.m.b.H., Burghausen and I. G. Rheinfelden. These plants were visited between March 18 and April 24, 1946. Vinyl chloride is made by the reaction of acetylene with hydrogen chloride in the gaseous phase and in the presence of activated charcoal impregnated with mercuric chloride or with barium chloride and mercuric chloride. The reaction is exothermic. The monomer is washed and scrubbed with caustic soda and neutralized. It is then liquified and fractionally distilled. The pure product is then transported in steel or enamel-lined steel tanks to polymerization plants. Burghausen production at Rheinfelden is 200-250 tons per month. Flowdiagrams and process details are given. A comparative cost sheet is included.

PB L 79310. CALDWELL, J. M. and SMITH, G. H. Mersol and Hostapon processes. I. G. Farbenindustrie, Höchst. (BIOS Final Rept 1222, Item 30). Oct 1946. 15 p. Price: Mimeo-$0.50

The information in this report supplements that contained in a fuller report entitled, "Textile auxiliary products. Development of Mersol and Hostapan processes by I. G. Farbenindustrie, Hoechst", BIOS Final Report 478, PB 31278, abstracted in v. 2, p. 942, of this Bibliography. The present report is based upon a visit to I. G. Hoechst on October 9, 1946 and is concerned chiefly with the production of Mersolat and Hostapon with particular reference to BIOS 478. A photograph and several flowdiagrams are included.

OTS Publications (contd)

PB L 81029. CHAMBERLAIN, K. A. J. and others. I.G. Farbenindustrie A. G.: The manufacture of triphenylmethane dyestuffs at Hoechst, Ludwigshafen and Leverkusen. (BIOS Final Rept 1433, Item 22) Jun 1947. 145 p. Price: Mimeo-$4.25

Processes are given for triphenylmethane dyestuffs at the three I. G. plants listed above. The general layout and types of vessels used appeared to be identical or very similar to those in use at Leverkusen, described in some detail in BIOS Final Report 1157, "Dyestuffs and intermediates at Leverkusen and Uerdingen factories." PB 69124, v. 6, p. 190, this Bibliography. At Höchst and Ludwigshafen, and particularly at the latter target, the plant appears to be very old. One outstanding exception was a most modern sulfonation plant erected at Höchst just prior to the war, and used on the production of Reflex, Water, and Ink Blues, etc. A list of plant is included in most of the processes. Flow diagrams are given for the production of Acid Violet 6 BNOO 3130, and for Induline.

PB L 79230. CHILTON, L. V. and TOPP, N. E. Production of Mersol products at I. G. Farbenfabrik, Wolfen. (BIOS Final Rept 1305, Item 22). Mar 1946. 6 p. Price: Mimeo-$0.25

Some details are given of the production of Mersol at Wolfen. Mersol is made by the sulfochlorination of the hydrocarbon Mepasin using ultraviolet activation according to the following reaction:

$$C_nH_{2n+2} + SO_2 + Cl_2 \longrightarrow C_nH_{2n+1}\cdot SO_2Cl + HCl$$

The sulfochlorination takes place in Igelit lined iron reaction towers 4 m. high x 2 m. internal diameter. The reaction is operated batchwise, continuous operation having been tried and found unsatisfactory. A temperature of 25° C. is used; in no case higher than 32-33° C. The reaction time for Mersol D (82% sulfochlorinated) is 24-26 hours, for Mersol H(45% sulfochlorinated), it is 11-12 hours. The Mepasin which is supplied by Leuna is prepared by the hydrogenation of Kogasin II - a Fischer-Tropsch hydrocarbon, having a boiling range 230°-320°. This is fully saturated, almost entirely straight-chain, and contains 0.2% or less of oxygen-containing compounds. The process described in this report is similar to the Leuna process, described in CIOS File XXXII-107, p. 101-103, PB 6650, v. 1, p. 570, this Bibliography.

PB L 79314. CLOUGH, M. Synthetic phenol, salicylic acid and developments in intermediates. Interrogation of Dr. Boehme of I. G., Leverkusen. (BIOS Final Rept 1246, Item 22, 30). n. d. 12 p. Price: Mimeo-$0.50

Dr. Boehme was interrogated concerning certain points of manufacture which were not brought out in previous investigations. Much of the information is of a very general nature since Dr. Boehme was not too familiar with details of the processes in question. The report deals with the sulfonation and chlorination routes in the production of synthetic phenol, the manufacture of salicylic acid from sodium phenolate and carbon dioxide, and the production of intermediates. For a previous report on these processes, see BIOS Final Report 664, "I. G. Farbenindustrie Leverkusen. Salicylic acid, sodium salicylate, synthetic phenol." PB 49272, v. 5, p. 98, this Bibliography.

PB L 79583. CROSS, J. and UNSWORTH, A. K. Welding of polyvinyl chloride. Summary of German practice. (BIOS Final Rept 1283, Item 22). Jul-Aug 1946. 13 p. Price: Mimeo-$0.50

Four plants were visited in order to study German practice in the welding of hard and soft (plasticised) P.V.C. and to compare the weldability of British P.V.C. using the same methods. The German plants visited were: (1) Messrs. Riedel de Haën, Seelze, Nr. Hanover; (2) Messrs. Krafft and Weichardt, Bremen & Wilderhausen; (3) Dynamit A. G., Troisdorff; and (4) Messrs. Gottfried Hagen, Cologne. Three methods of welding P.V.C. were seen in Germany: (1) Hot air torch, the air being heated by gas or electricity; (2) hand operated, electrically heated - copper bit; and (3) machine welding. Several photographs and sketches are included.

PB L 80349. ELLIS, J. F. Engineering in hydrogenation plants in Germany. (BIOS Final Rept 977, Item 30, 31). Mar 1946. 152 p. Price: Mimeo-$4.25

The engineering notes included in CIOS reports dealing with hydrogenation plants have been collected and supplemented by further information obtained from examination of evacuated documents. In some sections the information is scanty because at the time emphasis was on new techniques and developments of old ones, and details of plant similar to that in Great Britain were not obtained. The three outstanding features were the development of wound pressure vessels (wickelofen), automatic control of hydrogenation units at Seuna, and the incomplete but very instructive development of a steel for 700 Ats. preheaters which had a creep strength of 15 t/in² at 500° C. Achieved construction cost data for a number of plants were also obtained.

PB L 79444. LAWRENCE, J. and others. Henkel, Düsseldorf. Sodium perborate and sodium percarbonate. (BIOS Final Rept 1367, Item 22). Feb 1946. 43 p. Price: Mimeo-$1.00

Two processes were in use at this plant for the production of sodium perborate. The electrolytic process consisted in electrolysing an alkaline solution of sodium borate and separating the precipitated sodium perborate. Drawings illustrate the cell, electrode assembly, and TV drier. A flowdiagram is also presented. Production was 2500 - 3000 tons per year, borax efficiency, 98-99%. The chemical process depended on the reaction of hydrogen peroxide and borax in alkaline solution and the separation of the precipitated sodium perborate. Production was 2500 - 3000 tons per year, borax efficiency, 97%. Sodium percarbonate was made by the reaction of hydrogen peroxide with soda ash and salting out the resultant percarbonate. Capacity was 180 tons per month, the efficiency based on hydrogen peroxide, 88.5%. The report describes plant and process in all three manufactures. Also given are raw material and labor requirements, costs, efficiencies, and analyses.

PB L 79316. NAUNTON, W. J. S. Synthetic rubber. Interrogation of Dr. Bayer and Dr. Roelig of I. G. Farbenindustrie A. G., Leverkusen in U.K. (BIOS Final Rept 1166, Item 22, 31; Interrogation Rept 413). Aug 1946. 37 p. Price: Mimeo-$1.25

Dr. Roelig was interviewed concerning the following subjects: Tear resistance, Hoppler thermostat, Dr. Roelig's damping machine, I. G. abrasion machine, compression set and creep, cut growth, flexing, electrical tests, permeability to gases, and aging tests. Some information is given on these. Dr. Bayer was interviewed regarding production of isocyanates, polyester rubbers, coating compositions and adhesives based on di- and polyisocyanates (Desmodurs and Desmophens), and the reactions of acrylonitrile.

PB L 86030. RAIBLE, J. Spindle dynamics. Nov 1946. 14 p. Price: Mimeo-$0.75

For abstract, see this Bibliography under "Textiles and Textile Products."

PB L 85121. U. S. ARMY. FORCES IN THE EUROPEAN THEATER. CHIEF SIGNAL OFFICER. Dictionary of German electrical symbols. (DIN 40700). n. d. 120 p. Price: Mimeo-$3.00

This dictionary comprises approximately 1200 symbols used to designate components of German communication systems. Each symbol is identified according to conventional American designation. In addition, samples of various types of communications set-ups and line route networks are included. The German document DIN 40700 dated January 1941 constitutes the basis for this report.

PB L 86251. WILLIAMSON, WILLIAM B. Survey of various manufacturing methods in use by worsted industry for production of cloth, serge, O. D. (QM Textile Series Rept 27) Feb 1947. 56 p. Price: Mimeo-$1.75

For abstract see this Bibliography under "Textiles and Textile Products."

U. S. GOVERNMENT PRINTING OFFICE O 1948